ORDER NO: MAD0306001C2

Service Manual

DVD Player/ Video Cassette Recorder

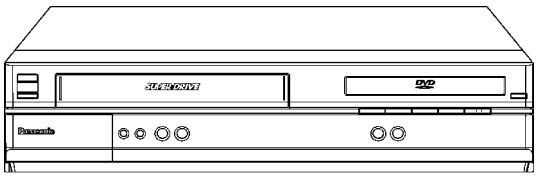
Panasonic VHS PAL VHS PAL/SECAM

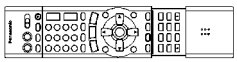
NV-VP25EC / NV-VP30EC / NV-VP30EB / NV-VP30EBL / NV-VP30EP / NV-VP30EF

Z-MECHANISM

Colour

(S).....Silver Type





EUR7615KS0

SPECIFICATIONS

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Power supply:	**AC220-240 V, 50/60 Hz**
Power consumption:	**27 W+/-1,3W**
	standby mode: 6W+/-0,4W
Dimensions:	**430 (W)×266 (D)×89 (H) mm (excluding protrusions)**
Mass:	**4.2kg**
Operating temperature range:	**+5 to+35°C**
Operating humidity range:	**35 to 80% RH (no condensation)**
Pickup:	
Wave length:	**658 nm/790 nm**
Laser power:	**CLASS 2/CLASS 1**
Video Recording signal:	
NV-VP30EB/EC/EP/EF	**PAL**
NV-VP30EF	**SECAM**
DVD Signal system:	**PAL625/50, PAL525/60, NTSC**
DVD Region number:	**Region No.2**
Playable disctype:	
(1) DVD-Video, DVD-RAM, DVD-Audio, DVD-R (R4.7)	
(2) CD-Audio (CD-DA), CD-Audio (TEXT)	
(3) Video CD (VCD, S-VCD)	
(4) CD-R/CD-RW (CD-DA, Video CD formatted discs)	
(5) MP3 (audio), WMA (audio), JPG (picture)	
Maximum number of tracks and groups recognizable:	
Compatible compression rate: between 32 kbps and 320 kbps	
999 tracks and 99 groups	
TV tuner system:	
NV-VP30EB	**UHF: CH21-CH68**
NV-VP30EC	**VHF: CHE2-CHE12**
	UHF: CH21-CH69
NV-VP30EP/BL	**VHF (OIRT): CHR1-CHR12**
	VHF (CCIR): CHE2-CHE12
	UHF: CH21-CH69
	CATV (OIRT): 44MHz-470MHz
	(CCIR):S1-S5
	(CCIR):M1-U10
	(CCIR):S21-S41 (8MHz Raster)
NV-VP30EF	**VHF SECAM: CH2-CH10**
	VHF PAL: CHE2-CHE12
	UHF SECAM: CH21-CH69
	UHF PAL: CH21-CH69
	CATV SECAM: B-Q, S21-S41
	CATV PAL: CHS01-CHS41
RF out system:	
NV-VP30EB	**UHF: CH21-CH68**
	71+/-3dB μ , 75 Ω close
NV-VP30EC/EP/EBL	**UHF: CH21-CH69**
	71+/-3dB μ , 75 Ω close
NV-VP30EF	**without RF converter**

Video Recording system:	
	4 rotary heads
	helical scanning system
Video heads:	
4 rotary heads	**1 pair for recording and playback**
	(L-R heads)
	1 pair for trick play
	(L'-R' heads)
Video input:	
EURO AV (AV1/ AV2)	**21 pin connector**
	1.0 Vp-p, 75 Ω terminated
VIDEO IN (AV3 front input)	**cinch connector**
	1.0 Vp-p, 75 Ω terminated
Video output:	
EURO AV (AV1/ AV2)	**21 pin connector**
	1.0 Vp-p, 75 Ω terminated
	VHS/ DVD cinch connector
	1.0 Vp-p, 75 Ω terminated
	DVD (only) cinch connector
	1.0 Vp-p, 75 Ω terminated
S-VIDEO Y	**1.0 Vp-p, 75 Ω terminated**
S-VIDEO C (PAL)	**0.3 Vp-p, 75 Ω terminated**
S-VIDEO C (NTSC)	**0.286 Vp-p, 75 Ω terminated**
DVD RGB video output:	
R output level:	**0.7 Vp-p (75 Ω)+/-10%**
G output lebel:	**0.7 Vp-p (75 Ω)+/-10%**
B output level	**0.7 Vp-p (75 Ω)+/-10%**
Output terminal:	**AV (21pin)**
Number of terminals:	**1 system**
Audio heads:	
1 stationary head	**Mono**
2 channels	**Hi-Fi Sound-Stereo**
Audio input:	
EURO AV (AV1/ AV2)	**21 pin connector**
	-6dBV (500mV)
	more than 10k Ω
AUDIO IN (AV3 front input)	**cinch connector**
	-6dBV (500mV)
	more than 10k Ω
Audio output:	
VHS/ DVD, DVD only	**cinch connector**
	-6dBV (500mV)
	less than 1k Ω
EURO AV (AV1/ AV2)	**21 pin connector**
	-6dBV (500mV)
	less than 1k Ω

DVD OPTICAL	**optical digital output**
Audio characteristics:	
S/N ratio	**Normal: more than 43dB (SP)**
	Hi-Fi: 65dB
	DVD: 115dB
Frequency responce	**Normal: 80Hz - 8kHz**
	Hi-Fi: 20Hz - 20kHz
	DVD: 4Hz - 22kHz (linear audio)
	48kHz sampling
	DVD: 4Hz - 44kHz (linear audio)
	96kHz sampling
	CD Audio: 4Hz - 20kHz
Total harmonic distortion:	**CD Audio: 0.0025%**
Dynamic range:	
VCR:	**more than 90dB**
DVD (linear audio):	**more than 98dB**
CD audio:	**more than 96dB**
Videotape speed:	
SP:	**23.39mm/s**
LP:	**11.695mm/s**
EP:	**7.796mm/s**
Record/ Playback time:	**SP: 4hours (240min. tape)**
	LP: 8hours (240min. tape)
	EP: 12hours (240min. tape)
FF/ REW time:	**60sec. (180min. tape)**

Note:

Specifications are subject to change without notice.

Mass and dimensions are approximate.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. INTRODUCTION

This service manual contains technical information which will allow service personnel to understand and service this model.
If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

Note:

Adjustment procedures, Disassembly Procedures and Assembly Procedures for VCR Mechanism Chassis are separate volume from this service manual. Please refer to the service manual for Z-Mechanism Chassis. (Order No. VRD9802005C2)

2. SAFETY PRECAUTIONS

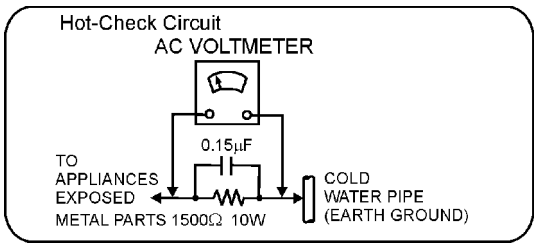
2.1. GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

2.1.1. LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to thechassis, the reading should be between 1MΩ and 5.2MΩ. / When the exposed metal does not have a return path to the chassis, the reading must be ∞.

Figure 1



2.1.2. LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15 μF

capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.

3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outsideof the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

3. PREVENTION OF ELECTRO STATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistorsand semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as alminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.

4. **Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil orcomparable conductive material).**
7. **Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.**

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. **Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD)sufficient to damage an ES device).**

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list.
It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

4. PRECAUTION OF LASER DIODE

CAUTION:

This product utilizes a laser diode with the unit turned “on”,
invisible laser radiation is emitted from the pickup lens.
Wave length: 658 nm/790 nm
Maximumoutput radiation power from pickup: 100 μW/VDE.
Laser radiation from the pickup lens is safety level, but be sure
the followings:

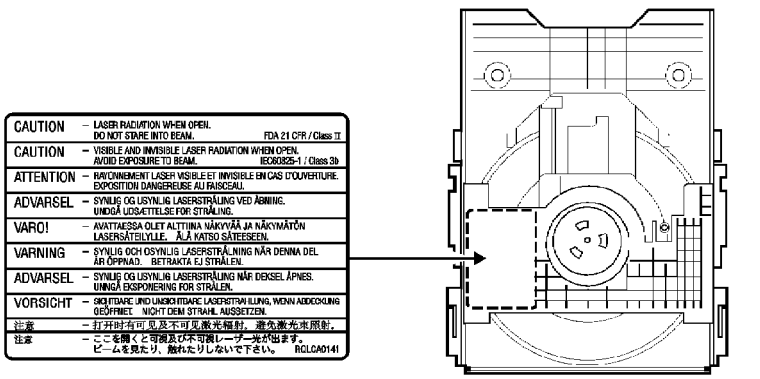
1. **Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.**
2. **Do not adjust the variable resistor on the pickup unit. It was already adjusted.**
3. **Do not look at the focus lens using optical instruments.**
4. **Recommend not to look at pickup lens for a long time.**

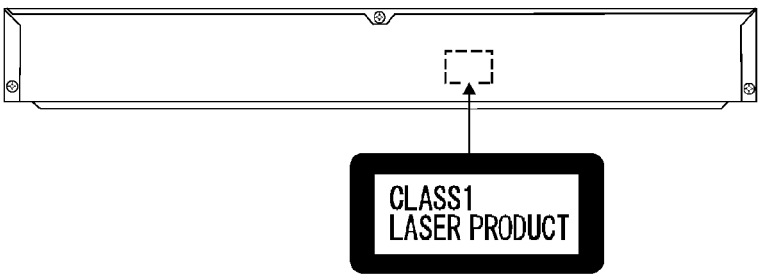
ACHTUNG:

Dieses Produkt enthält eine Laserdiode.
Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der
Lasereinheit ausgestrahlt.
Wellenlänge: 658 nm/790nm
Maximale Strahlungsleistung der Lasereinheit: VDE.
Die Strahlung der eingeschalteten Lasereinhei ungefährlich, wenn
folgende Punkte beachtet werden:

1. **Die Lasereinheit nicht zerlegen, da die Stral der freigelegten Laserdiode gefährlich ist.**
2. **Den werksseitig justierten Einstellregler de Lasereinheit nicht verstellen.**
3. **Nicht in die Fokussierlinse blicken.**
4. **Auch nicht mit optischen Instrumenten in d Fokussierlinse blicken.**

CAUTION – LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA 21 CFR / Class II
CAUTION – VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. IEC60825-1 / Class 3b
ATTENTION – RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
ADVARSEL – SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO! – AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING – SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN.
ADVARSEL – SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT – SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
注意 – 打开时有可见及不可见激光辐射，避免激光束照射。
注意 – ここを開くと可視及び不可視レーザー光が出ます。ビームを見たり、触れたりしないで下さい。 RCLCA014I





CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

4.1. ABOUT LEAD FREE SOLDER (PbF)

This model uses lead free solder (PbF). For repair use only lead free handsolder.

Caution:
Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70~F (30 - 40~C) higher. Please use a high temperature soldering iron. In case of the soldering iron with temperature control, please set it to 700 +/-20~F (370 +/-10~C). Pb free solder will tend to splash when heated too high (about 1100~F/ 600~C). When soldering or unsoldering, please completely remove all of the solder on the pins or solder areaand be sure to heat the soldering points with the Pb free solder until it melts enough.

5. PREVENTION OF STATIC ELECTRICITY DISCHARGE

The laser diode in the traverse unit (optical pickup) may brake down due to static electricity of clothes or human body. Use due caution to electrostatic breakdown when servicing and handling the laser diode.

5.1. GROUNDING FOR ELECTROSTATIC BREAKDOWN PREVENTION

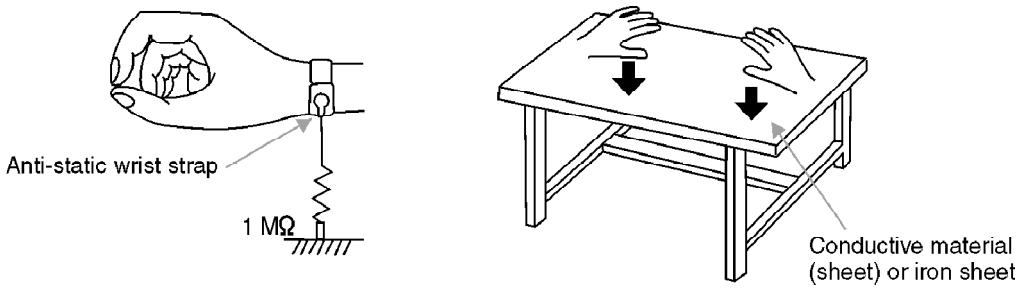
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

5.1.1. WORKTABLE GROUNDING

1. **Put a conductive material (sheet) or iron sheet on the area where the optical pickup is placed, and ground the sheet.**

5.1.2. HUMAN BODY GROUNDING

1. **Use the anti-static wrist strap to discharge the static electricity form your body.**



5.1.3. HANDLING OF OPTICAL PICKUP

1. **To keep the good quality of the optical pickup maintenance parts during transportation and before installation, the both ends of the laser diode are short-circuited. After replacing the parts with new**

ones, remove the short circuit accordingto the correct procedure. (See this Technical Guide.)

2. Do not use a tester to check the laser diode for the optical pickup. Failure to do so will damage the laser diode due to the power supply in the tester.

5.2. HANDLING PRECAUTIONS FOR TRAVERSE UNIT (OPTICAL PICKUP)

1. Do not give a considerable shock to the traverse unit (optical pickup) as it has an extremely high-precise structure.
2. When replacing the optical pickup, install the flexible cable and cut its short land with a nipper. See the optical pickup replacement procedure in this Technical Guide. Before replacing the traverse unit, remove the short pin for preventingstatic electricity and install a new unit. Connect the connector as short times as possible.
3. The flexible cable may be cut off if an excessive force is applied to it. Use caution when handling the cable.
4. The half-fixed resistor for laser power adjustment cannot be adjusted. Do not turn the resistor.

6. GENERAL DESCRIPTION

6.1. OPERATING INSTRUCTIONS

6.2. SERVICE CAUTION

6.2.1. REPLACING IC6002/EEPROM

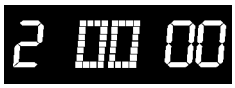
When the EEPROM: IC6002 is replaced, applicable model code, option code and electrical adjustment data will not be available.
Therefore, enter and/or adjust the necessary data after replacing IC6002 by referring following procedure.

STEP1.REPLACE THE IC6002

1. Remove the PCB with Mechanism unit by referring the Disassembly procedure.
2. Disconnect the AC plug and replace the IC6002.

STEP2.INPUT THE MODEL & OPTION CODE

1. Set up the applicable model code and option code by ordering the following table.

PROCEDURE	F.I.P. DISPLAY
Turn on the Service Mode **1.Press the FF key and the EJECT key simultaneously for more than 3 seconds.**	
Activate the Service Mode 2 **2.While keep placing FF key, press the EJECT key in twice.**	
Activate the Entering Mode. **3.Press the EJECT key for more than 3 seconds.**	
Set the Mode 2. **4.Press the CH UP key in twice.**	
Display the Setting Code. **5.Press the POWER Button to turn the power on.**	 **(Colon starts flashing)**
Enter the Model and Option Code. **6.Service Screen is displayed on the monitor.** **7.Set the applicable Model and Option code by using REW, PLAY, STOP and FF keys on theRemoteController. (See Fig.S1 & S2)**	
Exit from Service Mode. **8.Press the POWER Button to turn the power off.** **9. Press FF and EJECT keys simultaneously in 6 times.**	 **(Normal Indication)**

Service	
MAIN	VLRA0.17 3
ACS	NONE
Err	00
MC	42 h
OC 1	FC h
OC 2	78 h
CLK	- 1
VIP	OFF (depend)

Model No.	Model Code	Option Code 1	Option Code 2
NV-VP30EB	43 (h)	DC (h)	7C (h)
NV-VP30EBL	44 (h)	DC (h)	7c (h)
NV-VP30EC	42 (h)	FC (h)	78 (h)
NV-VP30EP	46 (h)	FC (h)	78 (h)
NV-VP30EF	45 (h)	FC (h)	7C (h)
NV-VP25EC	42 (h)	F8 (h)	78 (h)

NOTE:
Since all electrical adjustments data is still not available, perform the Electrical Adjustment continuously.

6.2.2. CYLINDER UNIT REPLACEMENT

1. CYLINDER UNIT REPLACEMENT

A. Remove the mechanism unit from MAIN PCB / Chassis by referring "SECTION 2. Disassembly Procedure".

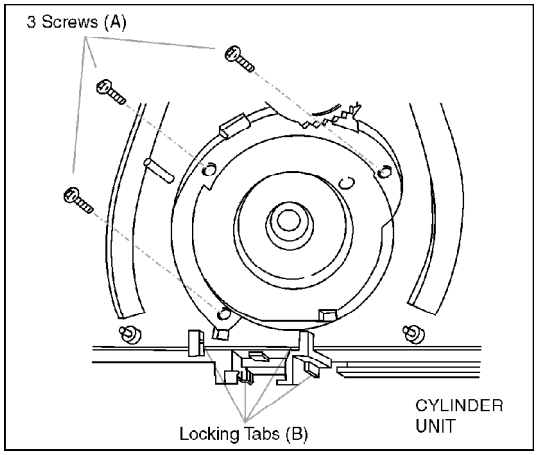
B. Remove the 3 screws (A) of the CYLINDER UNIT with a screw driver.

C. Unlock the 4 locking tabs (B) and disconnect the Cylinder flexible card from the FPC Holder.

D. Remove the CYLINDER UNIT.

CAUTION:

Handle the Cylinder flexible card with care. When it damaged, you should replace whole Cylinder unit.



2. UPPER CYLINDER DISASSEMBLY

A. Remove 2 screws (A).

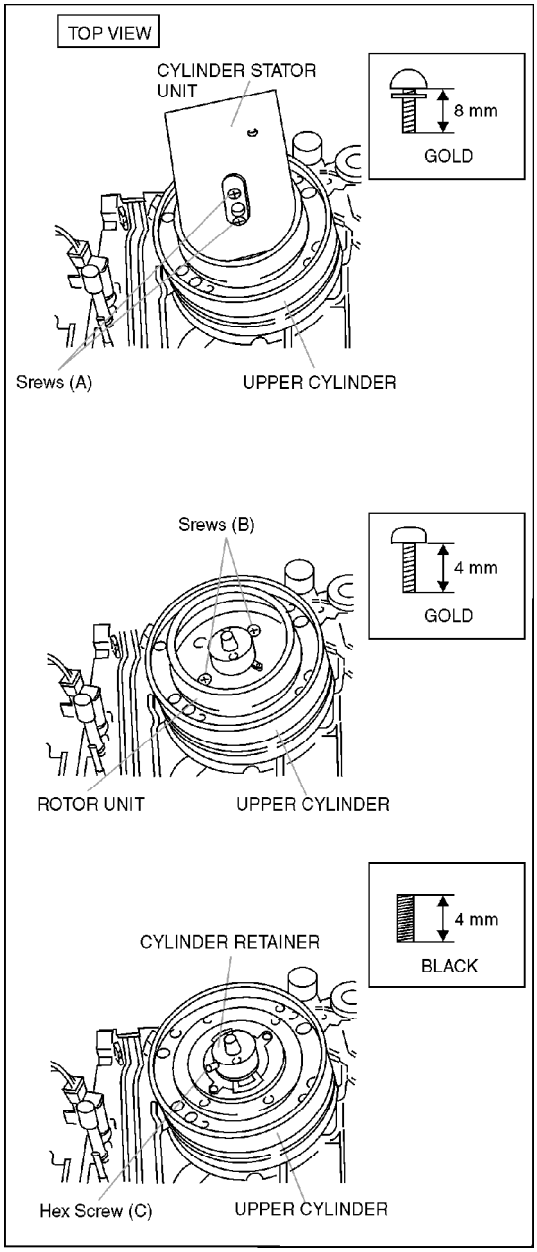
B. Remove the Cylinder Stator Unit.

C. Remove 2 screws (B).

D. Remove the Cylinder Rotor Unit.

E. Loose Hex screw (C) (1.5 mm) and remove the CYLINDER RETAINER.

F. Remove the Upper Cylinder.

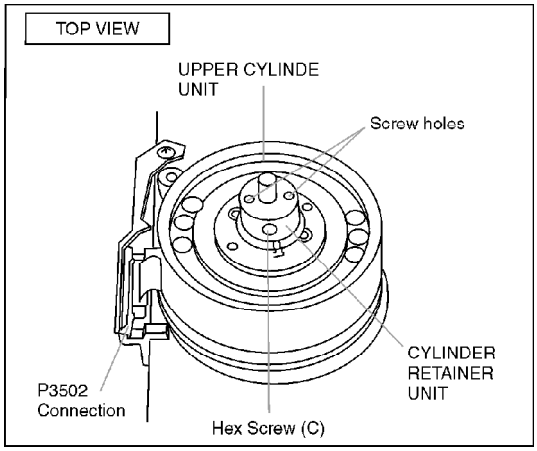


3. UPPER CYLINDER ASSEMBLY

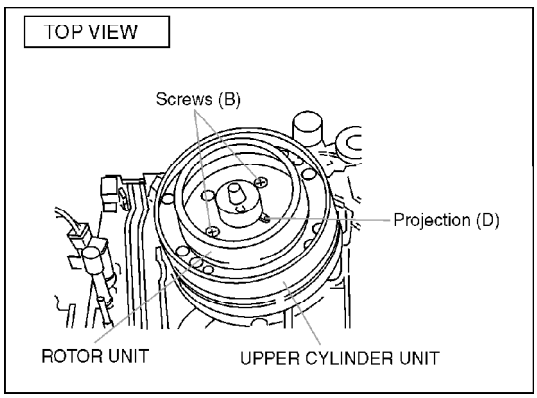
When reassembling, perform the steps in the reverse order.

Notes:

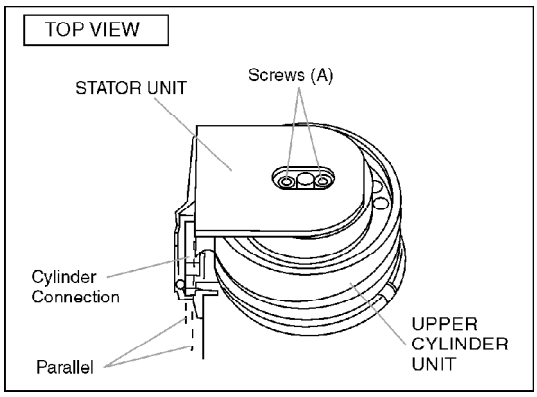
1. **Install the Cylinder Retainer so that the 2 holes on top of the Cylinder Retainer are at right angles with the P3502 Connection.**
2. **Tighten the Hex screw (C) (1.5 mm) while pressing down on top of the Cylinder Retainer.**



3. **Install the Cylinder Rotor Unit so that the inner hole of the Cylinder Rotor Unit fits to the small projection (D) on top of the Upper Cylinder.**
4. **Tighten 2 screws (B).**



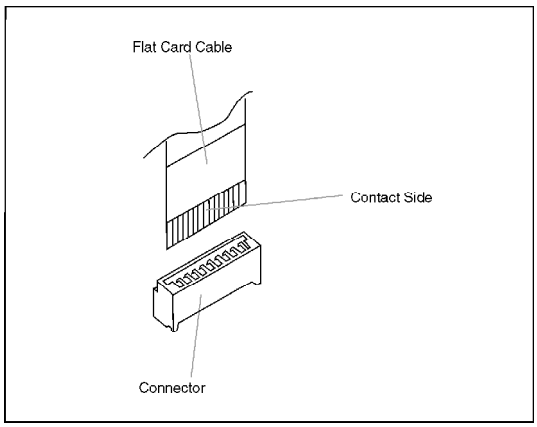
5. **install the Cylinder Stator Unit.**
6. **Tighten 2 screws (A).**



7. **Confirm the PG SHIFTER ADJUSTMENT with the alignment tape (PAL: VFJ8125H3F) and adjust it if necessary.**

6.2.3. FLAT CARD CABLE INSTALLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.



6.3. REMOVAL OF CASSETTE TAPE

There are 2 ways to remove a cassette tape.

1. Service Information Display Operation

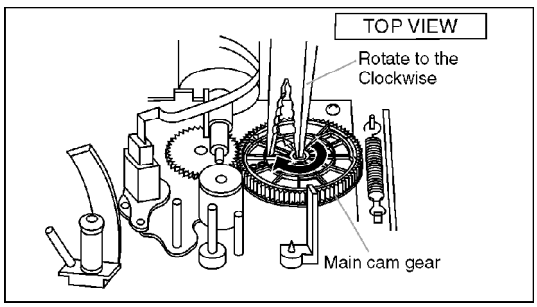
A. Press the FF and EJECT keys simultaneosly for 3 seconds and set the Service Mode 7.

B. Press STOP key in order to rotate the Loading Motor for unloading operation. (Pay an attention of tape slack)

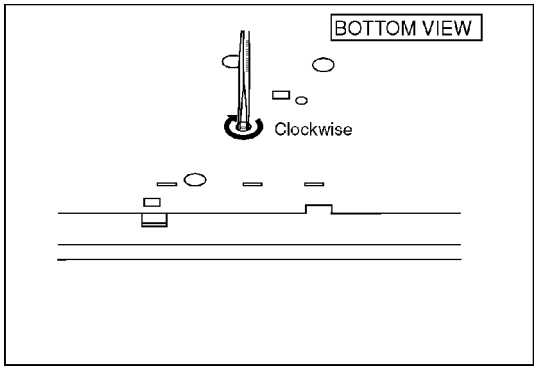
2. Manual Operation

A. Disconnect the AC Mains Lead and remove the Top Panel.

B. Rotate the Main Cam Gear clockwise until the Loading Posts move to fully unloaded position (tape is remaining).



C. Rotate the Capstan Motor clockwise from the bottom side to take up the tape.



D. Rotate the Main Cam Gear clockwise until the cassette tape is ejected.

6.4. INTRODUCTION OF VIDEO HEAD CLEANING CASSETTE (POLISHING TYPE)

1. **We are pleased to introduce Panasonic Video Head Cleaning Cassette, VFK0923FT [for service purposes] and VFK0923FSE [for end users] for all VHS/SVHS VCP and VCR.**
2. **These cleaning cassettes are exclusive removing the hard and sticky clogging on video heads.**
3. **These improve the efficiency of video head cleaning service and shortening cleaning time for end users.**

VFK0923FT (For Service usage)	
Type of Cassette	Full VHS Cassette
Cleaning Time	10 Seconds/Time
Tape Length	20 m
Usability in a Path	180 Times

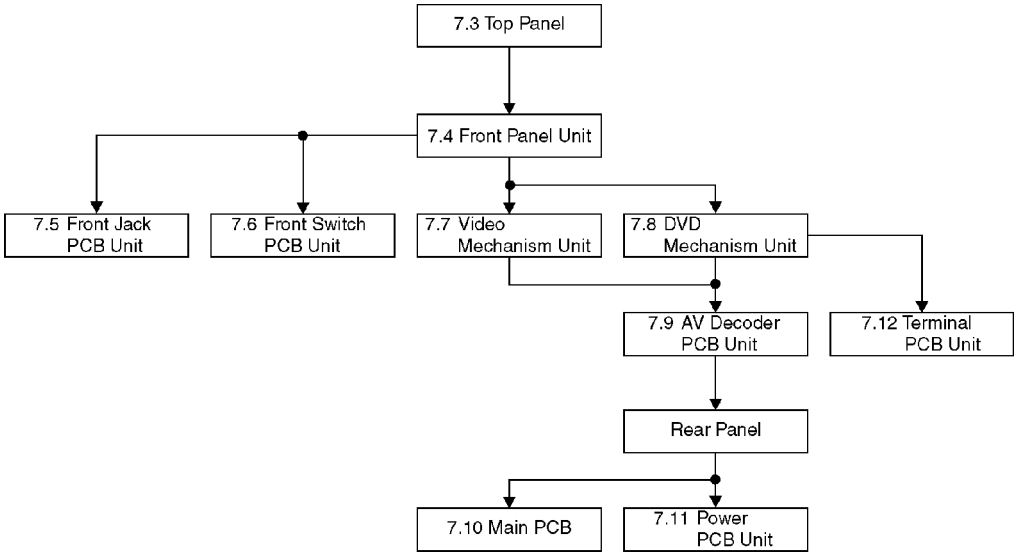
VFK0823FSE (For end users)	
Type of Cassette	**Full VHS Cassette**
Cleaning Time	**10 Seconds/Time**
Tape Length	**3.34 m**
Usability in a Path	**30 Times**

Note:

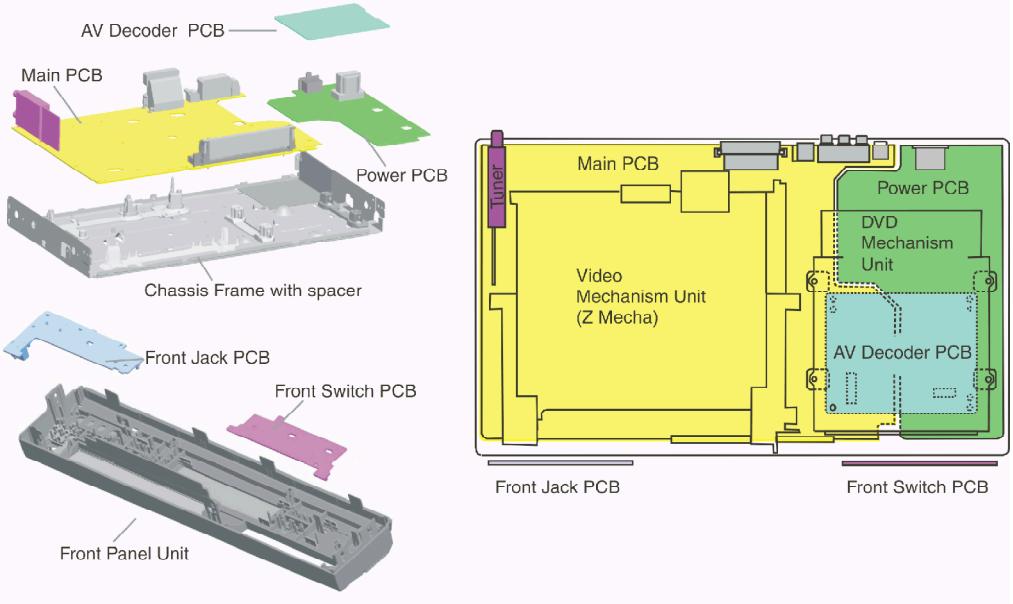
The tape material itself is the same in both types.

7. DISASSEMBLING THE CASING AND CHECKING PCBs

7.1. DISASSEMBLY PROCEDURE

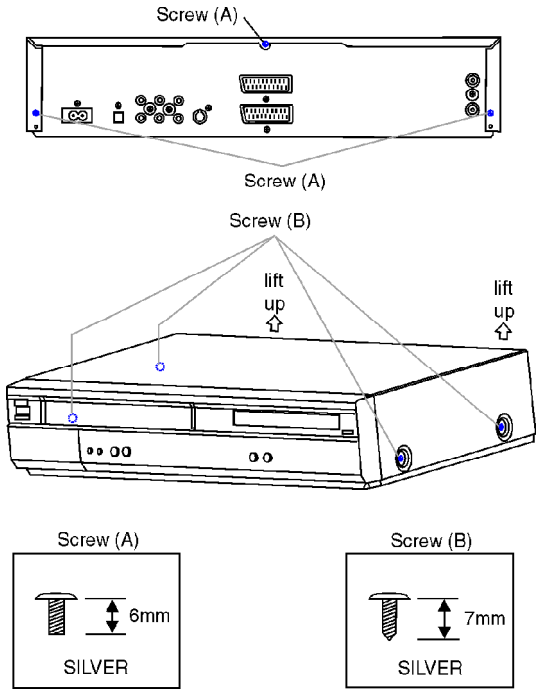


7.2. CASING PARTS AND PCB POSITIONS



7.3. TOP PANEL

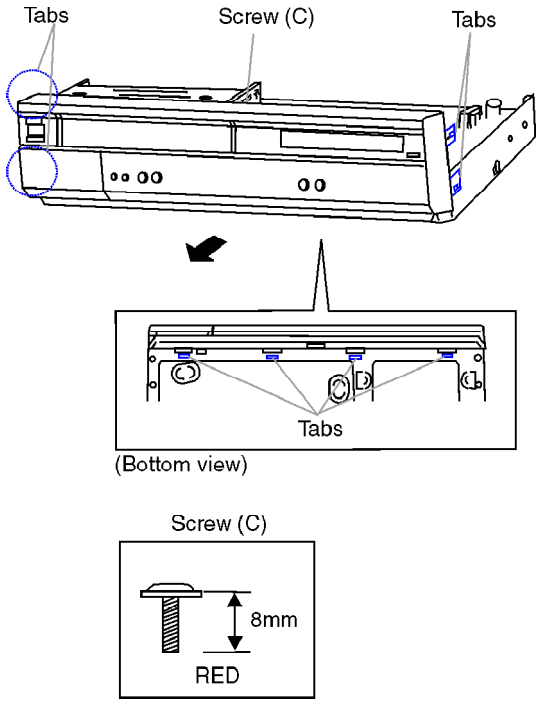
1. Unscrew the Screws.



7.4. FRONT PANEL UNIT

1. Unscrew the Screw.

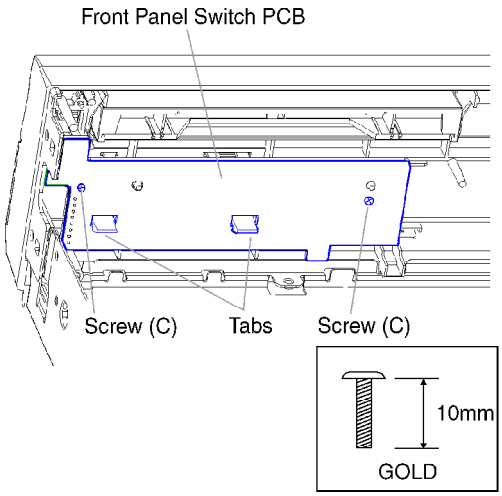
2. Remove the Tabs.



7.5. FRONT PANEL SWITCH PCB UNIT

1. Release the Screws.

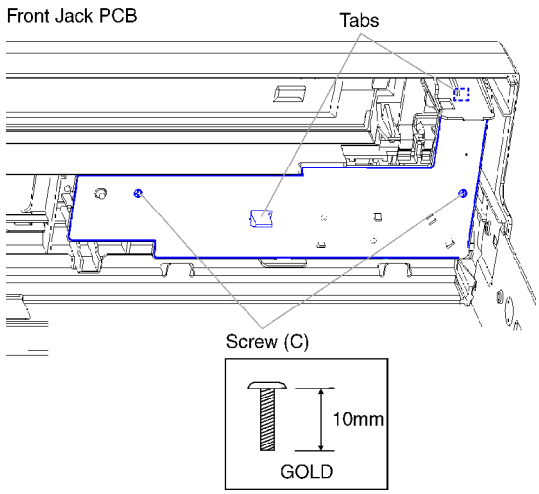
2. Remove the Tabs.



7.6. FRONT PANEL JACK PCB UNIT

1. Unscrew the Screws.

2. Remove the Tabs.

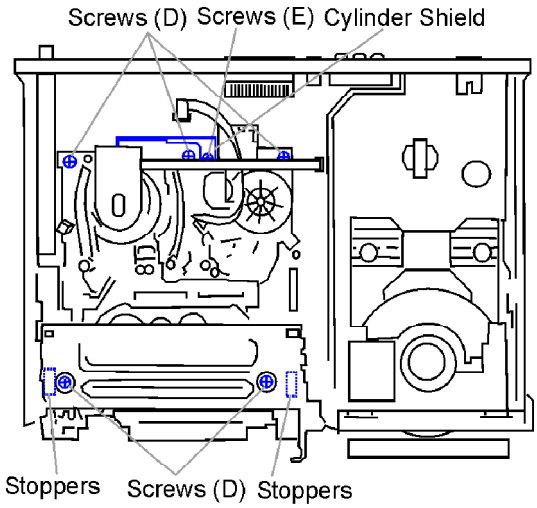


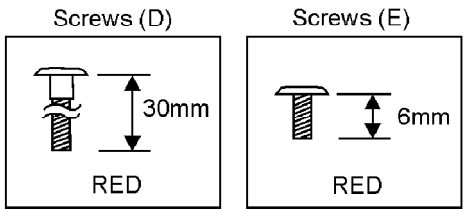
7.7. VHS MECHANISM UNIT

1. Unscrew the Screws.

2. Press the 2 stoppers and move the Cassette Holder Plate to the rear.

3. Bend the Cylinder Shield away and remove the VHS Mechansim Unit.

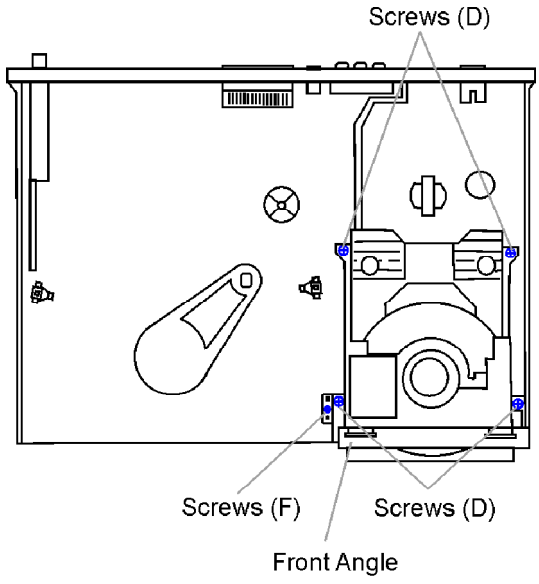


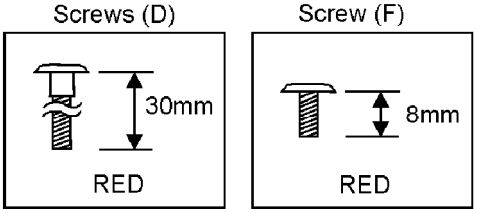


7.8. DVD MECHANISM UNIT

1. Unscrew the Screws.

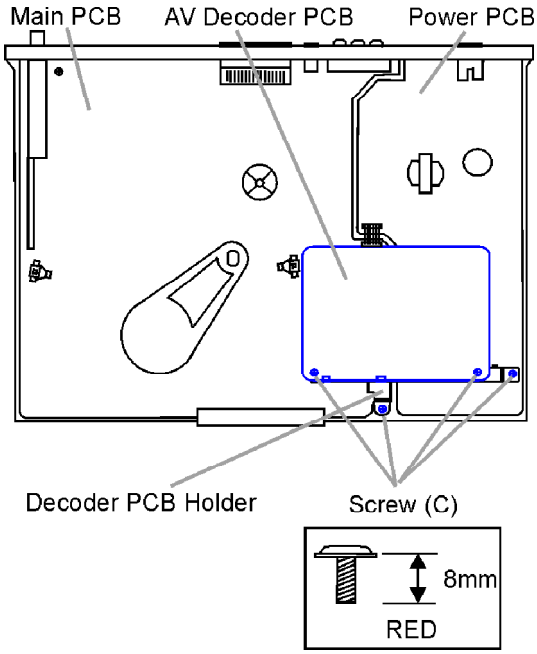
2. Remove the DVD Mechansim Unit.





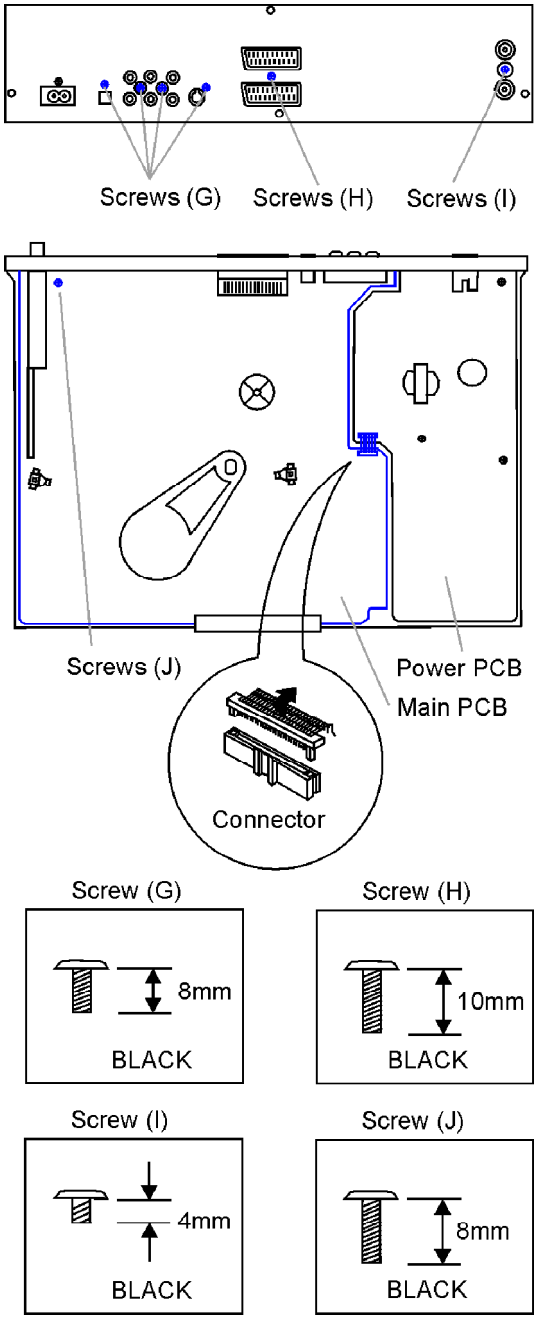
7.9. AV DECODER PCB UNIT

1. Unscrew the Screws.
2. Remove the AV Decoder PCB Unit together with the Decoder PCB Holder.



7.10. MAIN PCB UNIT

1. Unscrew the Screws.
2. Release the Connector.
3. Remove the Main PCB Unit.

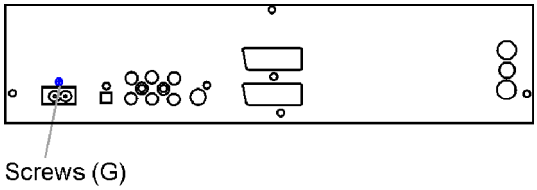


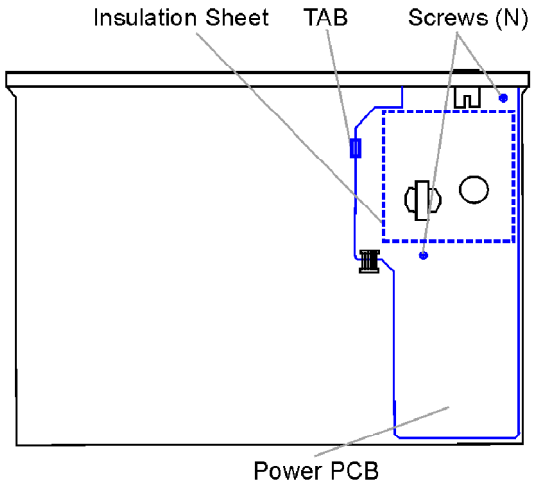
7.11. POWER PCB UNIT

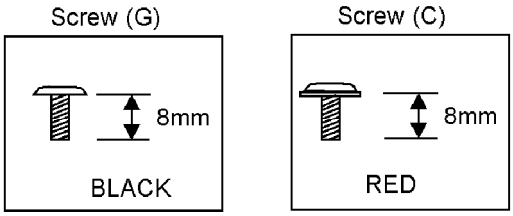
1. Unscrew the Screws.

2. Release the Tab.

3. Remove the Power PCB Unit.







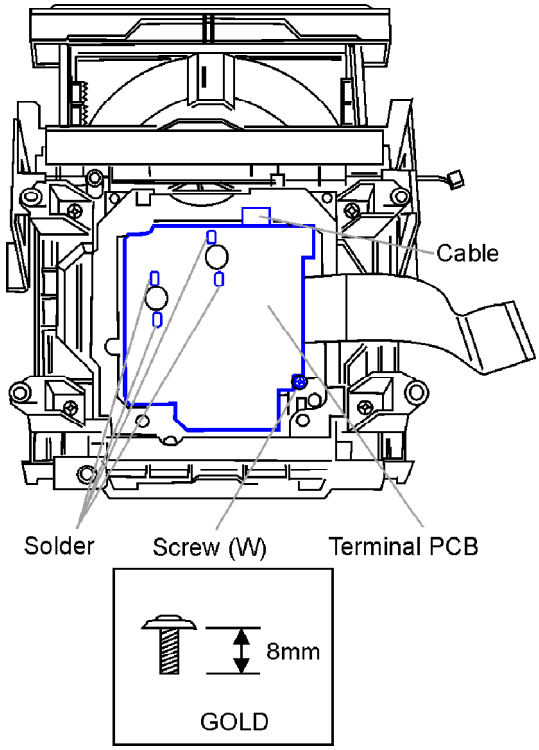
7.12. TERMINAL PCB UNIT

1. Unscrew the Screw.

2. Remove the Solder.

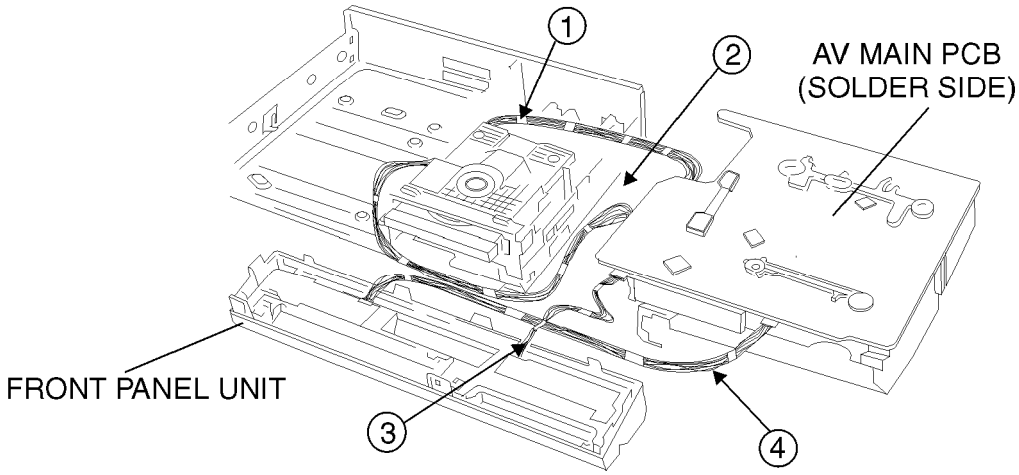
3. Remove the Cable.

4. Remove the Terminal PCB Unit.

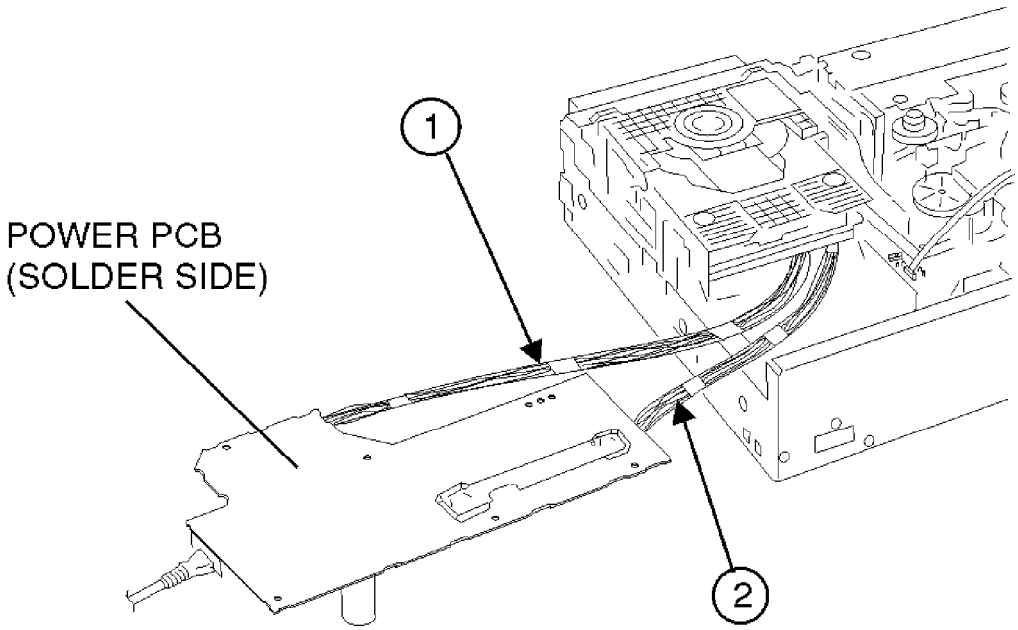


7.13. SERVICE POSITION

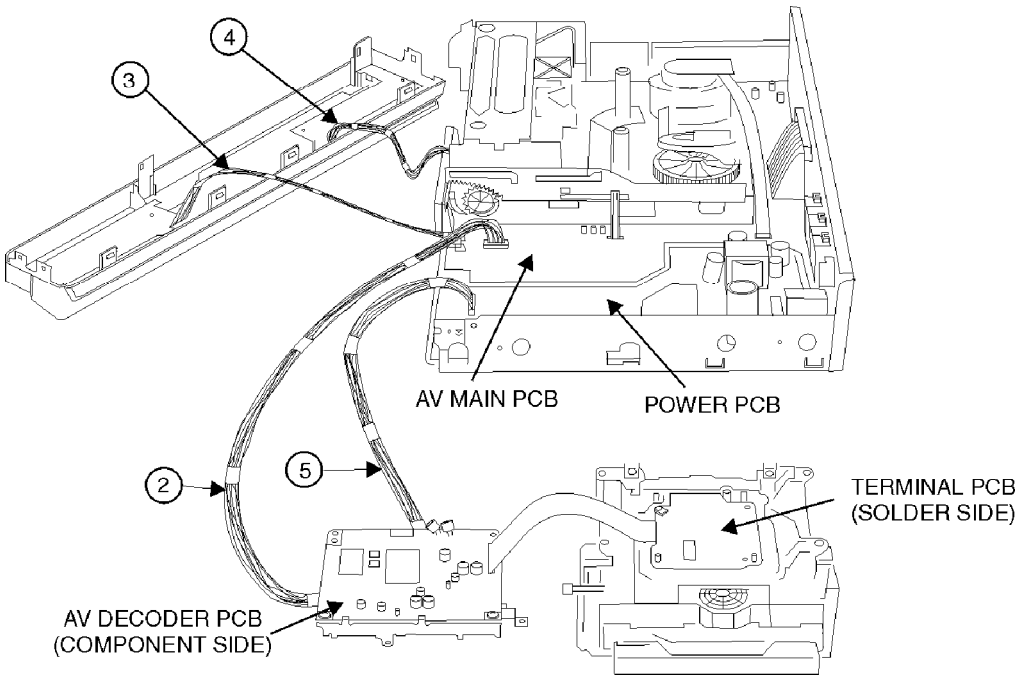
7.13.1. SERVICE POSITION OF THE AV MAIN PCB



7.13.2. SERVICE POSITION OF THE POWER SUPPLY PCB



7.13.3. SERVICE POSITION OF THE DECODER PCB AND TERMINAL PCB



7.13.4. LIST OF THE EXTENTION CABLES

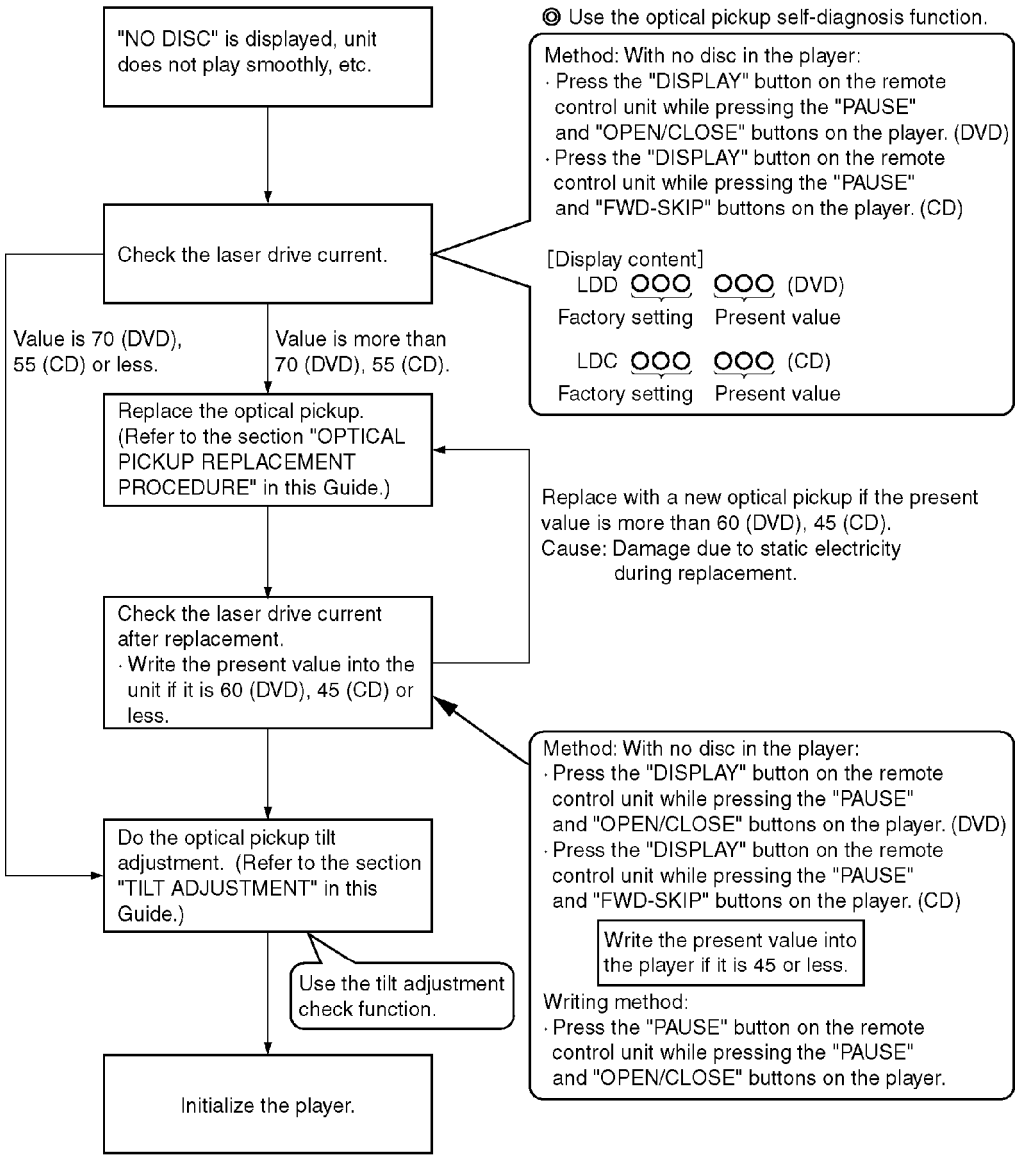
No.	Part No	Pins	Content
1	VFK1876	13pins	PS1301 (Power PCB) - P1001 (AV Main PCB)
2	JGS0116	22pins	PS8002 (AV Decoder PCB) - P4301 (AV Main PCB)
3	VFK1874	6pins	PP7501 (Front Switch PCB) - PS7502 (AV Main PCB)
4	VFK1875	10pins	PP4801 (Front Jack PCB) - PS7501 (AV Main PCB)
5	VUC8026	14pins	PS8001 (AV Decoder PCB) - PP1302 (Power PCB)

8. OPTICAL PICKUP SELF-DIAGNOSIS AND REPLACEMENT PROCEDURE

8.1. SELF-DIAGNOSIS

The optical pickup self-diagnosis function and tilt adjustment check function have been included in this unit. When repairing, use the following procedure for effective Self-diagnosis and tilt adjustment. Be sure to use the self-diagnosis functionbefore replacing the optical pickup when "NO DISC" is displayed. As a guideline, you should replace the optical pickup when the value of the laser drive current is more than 55.

Note:
Press the power button to turn on the power, and check the value within three minutes before the unit warms up. (Otherwise, the result will be incorrect.)


"NO DISC" is displayed, unit does not play smoothly, etc.
Check the laser drive current.
Value is 70 (DVD), 55 (CD) or less.
Value is more than 70 (DVD), 55 (CD).
Replace the optical pickup. (Refer to the section "OPTICAL PICKUP REPLACEMENT PROCEDURE" in this Guide.)
Check the laser drive current after replacement.
· Write the present value into the unit if it is 60 (DVD), 45 (CD) or less.
Do the optical pickup tilt adjustment. (Refer to the section "TILT ADJUSTMENT" in this Guide.)
Use the tilt adjustment check function.
Initialize the player.
◎ Use the optical pickup self-diagnosis function.
Method: With no disc in the player:
· Press the "DISPLAY" button on the remote control unit while pressing the "PAUSE" and "OPEN/CLOSE" buttons on the player. (DVD)
· Press the "DISPLAY" button on the remote control unit while pressing the "PAUSE" and "FWD-SKIP" buttons on the player. (CD)
[Display content]
LDD OOO OOO (DVD)
Factory setting Present value
LDC OOO OOO (CD)
Factory setting Present value
Replace with a new optical pickup if the present value is more than 60 (DVD), 45 (CD).
Cause: Damage due to static electricity during replacement.
Method: With no disc in the player:
· Press the "DISPLAY" button on the remote control unit while pressing the "PAUSE" and "OPEN/CLOSE" buttons on the player. (DVD)
· Press the "DISPLAY" button on the remote control unit while pressing the "PAUSE" and "FWD-SKIP" buttons on the player. (CD)
Write the present value into the player if it is 45 or less.
Writing method:
· Press the "PAUSE" button on the remote control unit while pressing the "PAUSE" and "OPEN/CLOSE" buttons on the player.

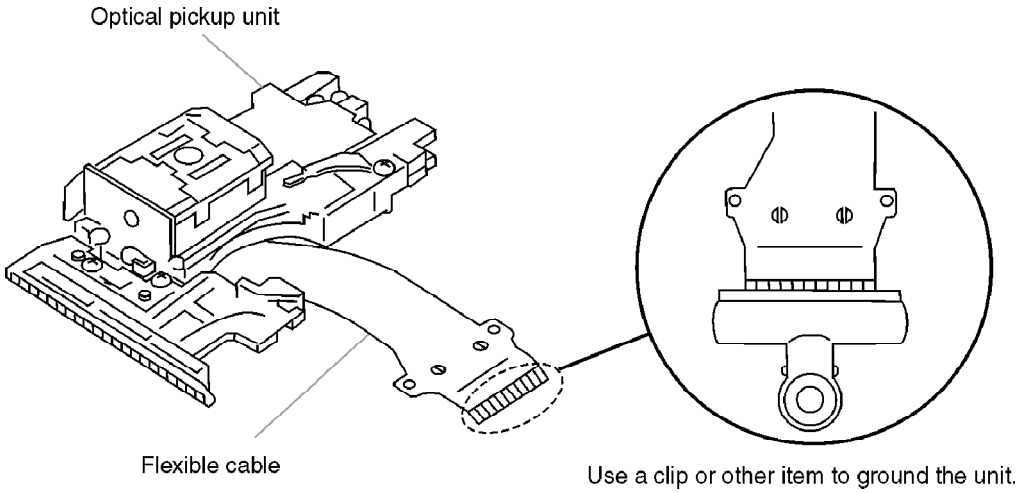
8.2. CAUTIONS TO BE USED BEFORE REPLACING THE OPTICAL PICKUP UNIT AND SPINDLE MOTOR ASSEMBLY

Before replacing the optical pickup unit and spindle motor assembly, check the total using hours for each of them. The checking method is as follows:

	Operating state & Key operation	Displa
Using hours of CD laser	Press “PAUSE”, “FWD-SKIP” and “5” on the remote control in this order while the unit is stopped	T1_xxxx_yyyy yyyy: total hou displayed by 4-digit figures hours).
Using hours of DVD laser	Press “PAUSE”, “FWD-SKIP” and “5” on the remote control in this order while the unit is stopped	T1_xxxx_yyyy yyyy: total hou displayed by 4-digit figures hours).
Using hours of SP motor	Press “PAUSE”, “FWD-SKIP and “6” on the remote control in this order while the unit is stopped	T2_xxxx yyyy: total hou displayed by 4-digit figures hours).
Resetting using hours of CD and DVD lasers (Simultaneous resetting)	Press “STOP”, “FWD-SKIP” and “5” on the remote control in this order while displaying Timer 1 data.	T1_0000_0000
Resetting using hours of the motor	Press “STOP”, “FWD-SKIP” and “6” on the remote control in this order while displaying Timer 2 data.	T2_0000

Cautions to be taken when replacing the optical pickup
The optical pickup may break down due to the static electricity of human body. Take proper protection measures against static electricity before repairing the parts around the optical pickup. (See the page describing the PREVENTION OF STATIC ELECTRICITYDISCHARGE.)

1. **Do not touch the areas around the laser diode and actuator.**
2. **Do not judge the laser diode with a tester. (The tester will be damaged easily.)**
3. **It is recommended to use a destaticized soldering iron for short-circuiting or removing the laser diode. (Recommended soldering iron) HAKKO ESD Product**
4. **Solder the land of the flexible cable in the optical pickup.**



Note:

- When using a soldering iron which is not destaticized, short-circuit the terminal face of the flexible case with a clip. After that, short-circuit the land.

- After the repairing work is completed, remove the solder according to the correct procedure shown in this Technical Guide.

9. SELF-DIAGNOSIS FUNCTION AND SERVICE MODES

9.1. IMPROVING THE SELF-DIAGNOSIS FUNCTION

The self-diagnosis funciton in our DVD player currently in use is improved as follows:

Our DVD player currently in use	Our new DVD	
UHF error display The latest error storage function n=1	UHF error display The latest error storage n=20	The storage capacity is incraesed.
Jitter/read error display	Jitter/read error display Focus drive value display	The focus drive current value can be displayed.
Laser drive current display For DVD	Laser drive current display For DVD/CD	
	ADSC internal RAM data display	The servo learning value stored in the RAM data inside the ADSC (servo controller) IC is displayed.
	Servo process display	Mainly in the initial starting operation period of the player, a number is allotted to the servo process of each step, and the process of the starting operation can be displayed.
	Total operation time display SP motor Laser (DVD/CD)	The operation times of SP motor and the laser (both for the DVD and CD) can be displayed.

9.2. SERVICE MODE TABLE 1

The service modes can be activated by pressing various button combination on the player and remote control unit.

Player buttons	Remote control unit buttons	Application	N
PAUSE + OPEN/CLOSE	0	Displaying the UHF display F_ _ _	Refer to 8.2. Self- Functior Display)
	5	Jitter check, tilt adjustment *Display shows J_xxx_yyy_zz "yyy" and "zz" shown to the right have nothing to do with the jitter value. "yyy" is the error counter, while "zz" is the focusdrive value. Referto section 10.4. for Optical Pickup Tilt Adjustment Procedure.	Refer to 10.4. Op Pickup T Adjustm
	6	Checking the region numbers and broadcast system	
	7	Checking the program version	
	9	Lighting Confirmation Function of Display Tube	
	DISPLAY	Checking the laser drive current	Refer to Optical F Replace Procedu
	PAUSE	Writing the laser drive current value after replacing the optical pickup (do not use for anything other than optical pickup replacement)	

Player buttons	Remote control unit buttons	Application	N
PAUSE SKIP/ SEARCH<< OPEN/CLOSE		Initializing the DVD player (restoring factory preset settings)	Refer to 8.4. Initia DVD play

9.3. DVD SELF DIAGNOSTIC FUNCTION-ERROR CODE

Error Code	Error Content	Additional error explanation
U11	Focus error	
H01	Tray loading error	
H02	Spindle servo error	(Spindle servo, DSC SP motor, CLV servo e
H03	Traverse servo error	
H04	Tracking servo error	
H05	Seek error	
H06	Power error	Cannot switch off the power because of the and system computer communication error
H07	Spindle motor drive error	
F103	Illegal highlight Position	Big possibility of disc specification violatio highlight display
F498	No communication between Front Micro Computer and Main Micro Computer after power on	
F499	No response from Main Micro Computer when key code is sent from Front Micro Computer to Main Micro Computer	Main Micro Computer hangs up
F4FF	Force initialize failure (time out)	
F500	DSC error	DSC stops in the occurence of servo error (focus error, etc)
F501	DSC not Ready	DSC-system computer communication erro (Communication failure caused by idling of
F502	DSC Time out error	Similar disposal as F500
F503	DSC communication Failure	Communication error (result error occured communication command was sent)
F505	DSC Attention error	Similar disposal as F500
F506	Invalid media	Disc is flipped over, TOC unreadable, incom disc
F600	Access failure to management information caused by demodulation error	Operation stopped because navigation data accessible caused by the demodulation def
F601	Indeterminate sector ID requested	Operation stopped caused by the request to abnormal ID data
F602	Access failure to LEAD-IN caused by demodulation error	LEAD IN data unreadable
F603	Access failure to KEYDET caused by demodulation error	Access failure to CSS data of disc
F610	ODC abnormality	No permission for command execution
F611	6626 QCODE don’t read Error	Access failure to seek address in CD series
F612	No CRC OK for a specific time	Access failure to ID data in DVD series
F630	No reply to KEY DET enquiry	(for internal use only)
F631	CPPM KEY DET is not available till the FILE terminal	(CPPM file system is unreadable caused by scratches)
F632	CPPM KEY DET is not available	Been revoked or falsified

Error Code	Error Content	Additional error explanation
F103	Illegal highlight Position	Big possibility of disc specification violatio highlight display
F700	MBX overflow	When replying message to disc manager
F701	Message command does not end	Next message is sent before replying to dis
F702	Message command changes	Message is changed before it is sent as a re disc manager
F880	Task number is not appropriate	Message coming from a non-existing task
F890	Sending message when message is being sent to AV task	Sending message to AV task
F891	Message couldn't be sent to AV task	Begin sending message to AV task
F893	FROM falsification	
F894	EEPROM abnormality	
F895	Language area abnormality	Firm version agreement check for factory p setting failure prevention
F896	No existence model	Firm version agreement check for factory p setting failure prevention
F897	Initialize is not completed	Initialize completion check for factory prese failure prevention
F8A0	Message command is not appropriate	Begin sending message to AV task

Note:

An error code will be canceled if a power supply is turned OFF.

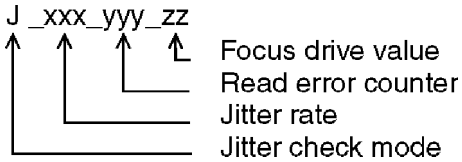
***1: CPPM is the copy guard function beforehand written in the disk for protection of copyrights.**

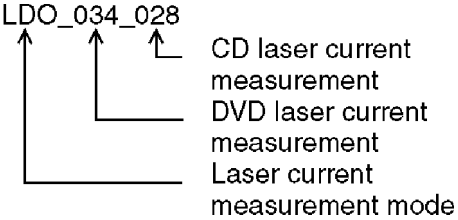
9.4. LAST ERROR CODE SAVED DURING NO PLAY

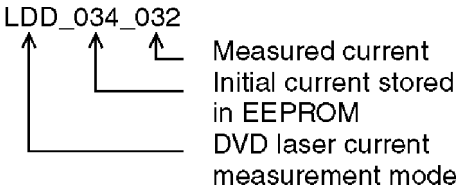
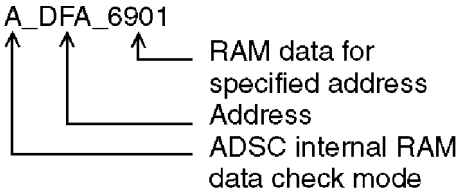
Error code	Error Content	System computer	Setting task	System computer error cod
F0BF	6) Cannot playback because physical layer is not recoginizable	PCND_NOPLAY PHYSICAL 0x50	DiscManager	0xDOBF
F0C0	8) DVD: Cannot playback because it is not DVD Video/ Adio/VR	PCND_NOPLAY VIDEO 0x70	DiscManager	0xDOC0
F0C1	9) DVD: Prohibited by the restricted region code	PCND_NOPLAY RCD 0x80	DiscManager	0xDOC1
F0C2	A) DVD: PAL restricted playback	PCND_NOPLAY PAL 0x90	DiscManager	0xDOC2
F0C3	B) DVD: Parental lock setting prohibits the playback of the entire title	PCND_NOPLAY PTL 0xA0	DiscManager	0xDOC3
F0C4	C) VCD: Prohibited because it is in PHOTO CD fromat	PCND_NOPLAY PHOTO CD 0xB0	DiscManager	0xDOC4
F0C5	VCD/CD: Prohibited because it is CDROM without CD-DA	PCND_NOPLAY CDROM 0xC0	DiscManager	0xDOC5

9.5. SERVICE MODE TABLE 2

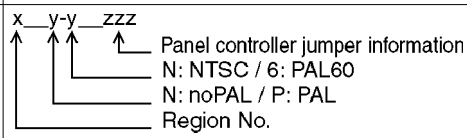
Pressing various button combinations on the player and remote control unit can activate the service modes.

Item	Player mode and button combination	Function	Display
Jitter check	**In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and "5" button on the remote control unit.**	**Jitter check Jitter rate is measured and displayed. Measurement is repeatedly done in the cycle of one second. Read error counter starts from zero upon mode setting. When target block data failed to be read out, the counter advances by one increment. When the failure is caused by minor error, it may be corrected when retried to enable successful reading. In this case, the counteradvances by one. When the error persists even after retry, the counter may jump by two or more.**	 **Jitter rate is shown in decimal notation to one place of decimal. Focus drive value is shown in hexadecimal notation.**

Item	Player mode and button combination	Function	Display
Error code check	**In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and "0" button on the remote control unit. * With pointing of cursor up and down on display,the panel controller switches serial number of history and sends out the command accordingly.**	**Error code check The latest error code stored in EEPROM is displayed.**	Error code (play_err) is expressed in the following convention. Error code = 0 x DAXX is expressed: → nn UXX Error code = 0 x DBXX is expressed: → nn HXX Error code = 0 x DXXX is expressed: → nn FXXX Error code = 0 x 0000 is expressed: → nn F--- * "nn" denotes the serial number of history.
Initial setting of laser drive current	**In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and PAUSE button on the romote control unit.**	**Initial setting of laser drive current Initial current value for each of DVD laser and CD laser is separately saved in EEPROM.**	LDO_034_028  **The value denotes the current in decimal notation. The above example shows the initial current is 34mA and 28mA for DVD laser and CD laser respectively when the laser iswitched on.**

Item	Player mode and button combination	Function	Display
DVD laser drive current measurement	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and DISPLAY button on the remote control unit.	DVD laser drive current measurement DVD laser drive current is measured and the result is displayed together with the initial value stored in EEPROM. After the measurement,DVD laser emission is kept on. It is turned off when POWER key is switched off. (It is also turned off when the primary power is switched off.)	 The value denotes the current in decimal notation. The above example shows the initial current is 34mA and the measured value is 32mA.
ADSC internal RAM data check	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and RETURN button on the remote control unit.	ADSC internal RAM data check ADSC internal RAM data is read out and displayed. Change the address with CLEAR key operation to show the data for 11 addresses.	 The value is shown in hexadecimal notation. The above example shows the data in ADSC address DFAh is 6901h.
Servo process display	In STOP (no disc) mode, press PAUSE and FWD-SKIP buttons on the player, and "7" button on the remote control unit.	Servo process display The servo process from STOP to ACCESS is displayed.	

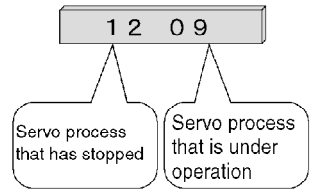
Item	Player mode and button combination	Function	Display
CD laser drive current measurement	**In STOP (no disc) mode, press PAUSE and FWD-SKIP buttons on the player, and DISPLAY button on the remote control unit.**	**CD laser drive current measurement CD laser drive current is measured and the result is displayed together with the initial value stored in EEPROM. After the measurement,CD laser emission is kept on. It is turned off when POWER key is switched off. (It is also turned off when the primary power is switched off.)**	LDC_028_026 Measured current Initial current stored in EEPROM CD laser current measurement mode **The value denotes the current in decimal notation.** **The above example shows the initial current is 28mA and the measured value is 26mA.**
Version display	**In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and "7" button on the remote control unit.**	**Version display**	srrr_xyzzz System controller release number System controller model number System controller generation Panel controller release number Panel controller model number
Lighting of display tube	**In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and "9" button on the remote control unit.**	**Lighting of display tube**	

Item	Player mode and button combination	Function	Display
Dealer~s lock	In STOP (no disc) mode, press STOP button on the player and POWER button on the remote control unit.	Dealer~s lock The lock is switched ON or OFF. When dealer~s lock is ON, it prohibits switching off of the secondary power and tray opening. When the lock is switched, its ON/OFFstatus is stored in EEPROM.	“LOCKED” sign appears when dealer~s lock is switched on, or when secondary power key or tray opening key is pressed while the lock is on. “UNLOCKED” signappears when dealer~s lock is switched off.
Initialization	In STOP (no disc) mode, press PAUSE, REV-SKIP and OPEN buttons on the player for 3 seconds or longer.	Initialization User settings are cancelled and player is initialized to factory setting.	“INITIALIZED”
Region display	In STOP (no disc) mode, press PAUSE and OPEN buttons on the player, and “6” button on the remote control unit.	Region display	
Timer 1 check	In STOP (no disc) mode, press PAUSE and FWD-SKIP buttons on the player, and "5" button on the remote control unit.	Timer 1 check Laser operation timer Operation time is measured separately for DVD laser and CD laser.	T1_1234_5678 Shown to the left is DVD laser time, and to the right CD laser time. Time is shown in 4 digits of decimal notation in a unit of 10 hours. "0000" willfollow "9999".

Item	Player mode and button combination	Function	Display
Timer 1 reset	While displaying Timer 1 data, press STOP and FWD-SKIP buttons on the player, and "5" button on the remote control unit.	Timer 1 reset Laser operation timer Operation time of both DVD laser and CD laser is reset all at once.	T1_0000_0000
Timer 2 check	In STOP (no disc) mode, press PAUSE and FWD-SKIP buttons on the player, and "6" button on the remote control unit.	Timer 2 check Spindle motor operation timer	T2_1234 Time is shown in 4 digits of decimal notation in a unit of 10 hours. "0000" will follow "9999".
Timer 2 reset	While displaying Timer 2 data, press STOP and FWD-SKIP buttons on the player and "6" button on the remote control unit.	Timer 2 reset Spindle motor operation timer	T2_0000

9.6. SERVO PROCESS FLOW

Specification of the servo process display in the starting flow



(Restrictions)
All processes that are under operati on cannot be displayed due to the limit of the processing time.

Starting flow	Range of the servo process numbers	Processing items	
		Number	Contents of each process
START			
Initial setting Tray control	00	00	Each initial setting
TRV initial movement	01	01	TRV initial movement
Disc detection	02~08	02	Initial setting in FE system
		05	Detecting LD ON HALF
		08	Detecting CD LD ON
Disc type distinction	02~08	02	Initial setting in FE system
Focus servo	10~13	12	Focus ON
		13	FBAL adjustment
Tracking servo	14~15	15	Tracking ON
Gain learning	17	17	Gain adjustment in ADSC focus system
ID read	18~1A	19	DBAL/equalizer adjustment
		1A	ID read

9.7. DVD SERVO PROCESS DISPLAY MODE

In starting operation of the player, a number is allotted to each servo process so that the operation of each step can be seen. The relation between the process and the displayed number are as follows:

Number allotment to the servo process.

Process classification	Each processing item	Description	Proce
Initial start process	Initial start	The process starts after the tray is loaded. (The state is changed to “READY” or “PREPARE”.)	0~40
	Secondary learning	Servos for the DVD-DL 1st layer and the CD-DA double speed are learned in this step.	50~7F
Restart process	Restart	When a user operates in the “READY” state, each servo is turned on.	80~9F
Seek process	Seek	The optical pickup is moved to the disc destination in this process.	A0~BF

Process classification	Each processing item	Description	Proce
Repair process	Recover		
	(Error check)	An error is searched in the PLAY/SEEK state.	C1~C3
	(Attention)	An error is recovered following the attention error interrupt from the S-ODC.	C4~C6
	(Q code read)	If any Q code is improperly read, reset and retry.	C7~C9
Stop process	Stop	A servo is controlled in response to the user~s operation to stop the disc completely.	F0~FF

9.8. OVERVIEW OF EACH FUNCTION

9.8.1. CUMULATIVE OPEATION TIME DISPLAY

1. Operation/display

DVD/CD laser operation time
Unit: 10 hours in decimal notation

Spindle motor operation time
Unit: 10 hours in decimal notation

Key operations are as follows.
Laser operation time ..... In STOP mode, main unit PAUSE+ FWD-SKIP+ remote controller [5]
Spindle motor operation time ..... In STOP mode, main unit PAUSE+ FWD-SKIP+ remote controller [6]
To reset the timer, perform the following while displaying the time with above key operation.
Laser operation time ..... In STOP mode, main unit STOP+FWD -SKIP+ remote controller [5]
Spindle motor operation time ..... In STOP mode, main unit STOP+ FWD-SKIP+ remote controller [6]

2. How to utilize

Reference information in fault diagnosis of laser or spindle motor system
Review of faulty point in repeated repair

9.8.2. SERVO PROCESS DISPLAY

1. Operation/display

While the player is in STOP mode, perform the specified key operation to display the servo process number on FL.
When the display does not change from the error indication, press Open/Close key to show the servo process number.
Key operation: In STOP mode, main unit PAUSE+FWD- SKIP+ remote controller [7]

Number to the left ..... Process number when halted
Number to the right ..... Process number in progress

9.9. SALES DEMONSTRATION LOCK FUNCTION

This function prevents discs from being lost when the unit is used for sales demonstrations by disabling the disc eject function. "LOCKED" is displayed on the unit, and ordinary operation is disabled.

9.9.1. SETTING

The sales demonstration lock is set by simultaneously pressing STOP button on the player and POWER button on the remote control unit.

9.9.2. CANCELLATION

The lock can be cancelled by the same procedure as used in setting. ("UNLOCKED" is displayed on cancellation. Disconnecting the power cable from power outlet does not cancel the lock.)

9.10. HANDLING AFTER COMPLETING REPAIRS

Use the following procedure after completing repairs.

9.10.1. PRECAUTIONS

Do not disconnect the power plug from the outlet with the tray still open, then close the tray manually.

9.10.2. METHOD

Confirm that the power is turned on:

1. Press the "OPEN/CLOSE" button to close the tray.

2. Press the "POWER" button to turn off the power.

3. Disconnect the power plug from the outlet.

9.11. SERVICE PRECAUTIONS

Recovery after the dvd player is repaired
When an FROM or an EEPROM on the decoder PCB has replaced, carry out the recovery disc processing to optimize the drive. Playback the disk to process the recovery automatically.

Note:
This unit requires no initialization process carried out after the traditional DVD players were repaired.
When the recovery measures are taken, the customer setting will return to the factory setting as

same as the procedure described in item of "Initialization". Write down the contents of the setting before recovery processing and reset the player.

9.11.1. FIRMWARE VERSION-UP OF THE DVD PLAYER

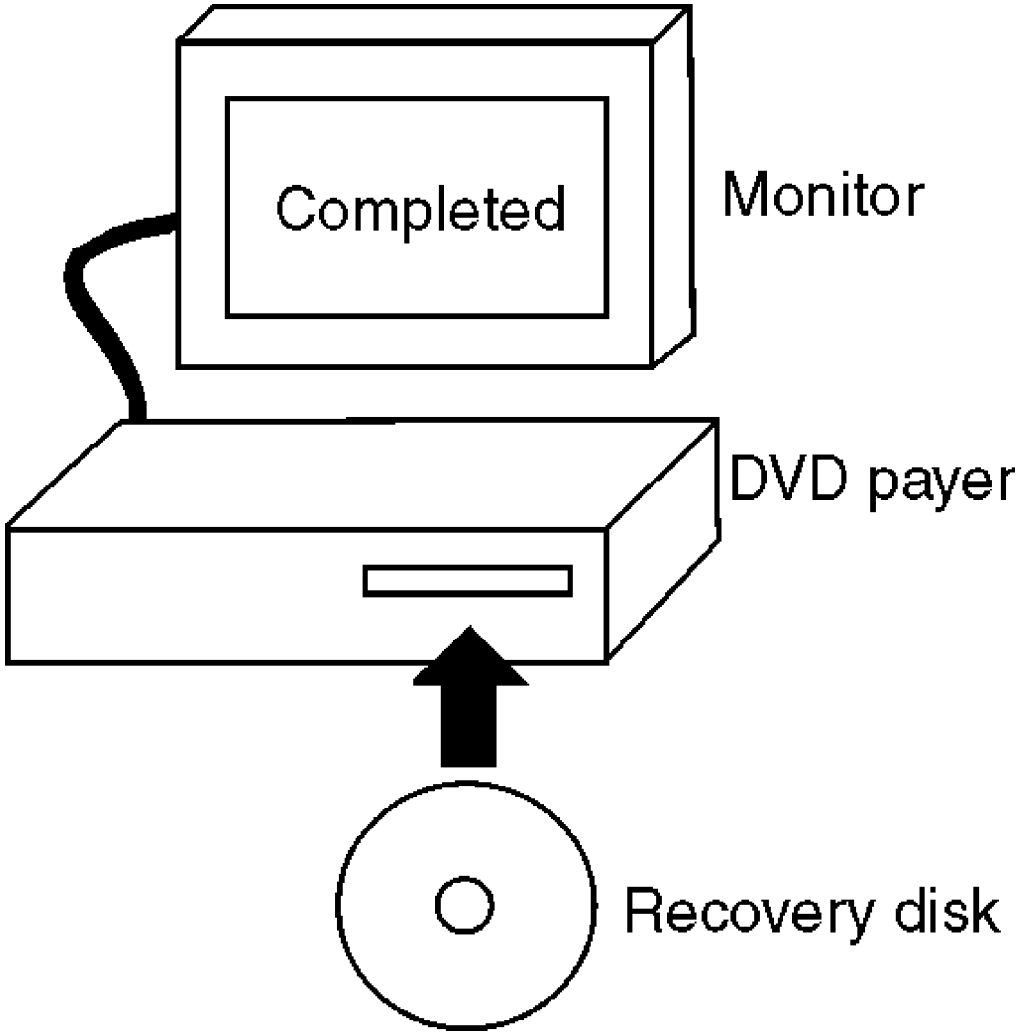
The firmware of the DVD player may be renewed to improve the quality including operationability and playability to the substandard discs processing to optimize the drive.

Note:
If the AC power supply is shut out during version-up due to a power failure, the version-up is improperly carried out. In such a case, replace the FROM and carry out the version-up again. The product number of the version-up disc will be noticedwhen it is supplied.

9.11.2. FIRMWARE VERSION-UP AND RECOVERY WITH DISC

- Recovery
- Firmware updating

Simply run the recovery disc. Then both of the above operations are automatically performed.
Commercially available CD-R can now perform updating and recovery process, making it easier to update the version.
Recovery process: Optimization of player after replacement of FROM and Decoder PCB.
Version updating: Firmware updating for improved operability and performance



9.11.3. HOW TO USE RECOVERY DISC

9.11.3.1. PERFORMIG RECOVERY

1. **Load the recovery disc RFKZD03R004 on to the player and run it.**
2. **Recovery is performed automatically. When it is finished, a message appears on the screen.**
3. **Remove the recovery disc.**
4. **Turn off the power.**

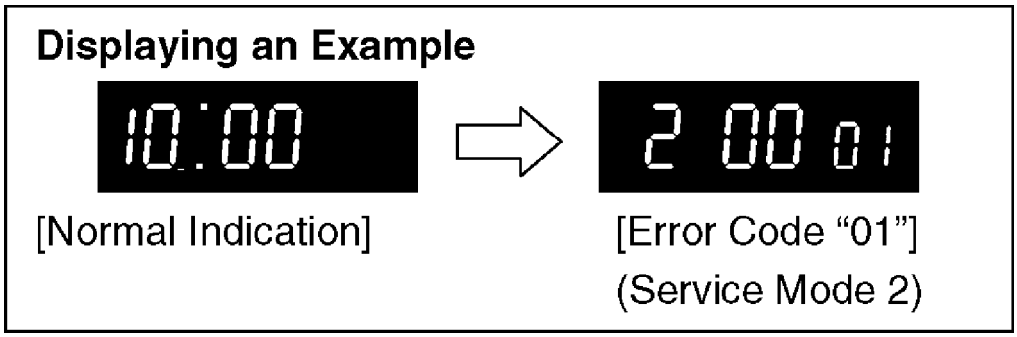
9.11.3.2. UPDATING FIRMWARE

1. **Load the recovery disc RFKZD03R004 on to the player and run it.**
2. **Firmware version of the player is automatically checked. Appropriate message appears whenever necessary.**
3. **Using remote controller's cursor key, select whether version updating is to be done or not. (Selection of Yes/No)**

4. a. If Yes is selected, version updating is performed.
   b. If No is selected, only recovery is performed.
5. a. When updating is finished, remove the disc according to the message appearing on the screen.
   b. Remove the disc according to the message appearing on the screen.
6. Turn off the power.

9.12. VCR SELF-DIAGNOSIS RESULT DISPLAY

The "SELF-DIAGNOSIS RESULT DISPLAY & MEMORY function is built in this VTR.
It means that when the VCR detects undesirable condition, it can be displayed a “Error code (Two numbers from the right)” with Service Mode 2.
Since the "Error code" is stored in the EEPROM, it can be displayed although after disconnected the AC leads. It can be displayed with Service Mode 2.
(If a second error had been detected, only the most recent error is displayed.)
For more details, refer to the Service Manual for Z-Mechanism Chassis Order number VRD9802005C2.

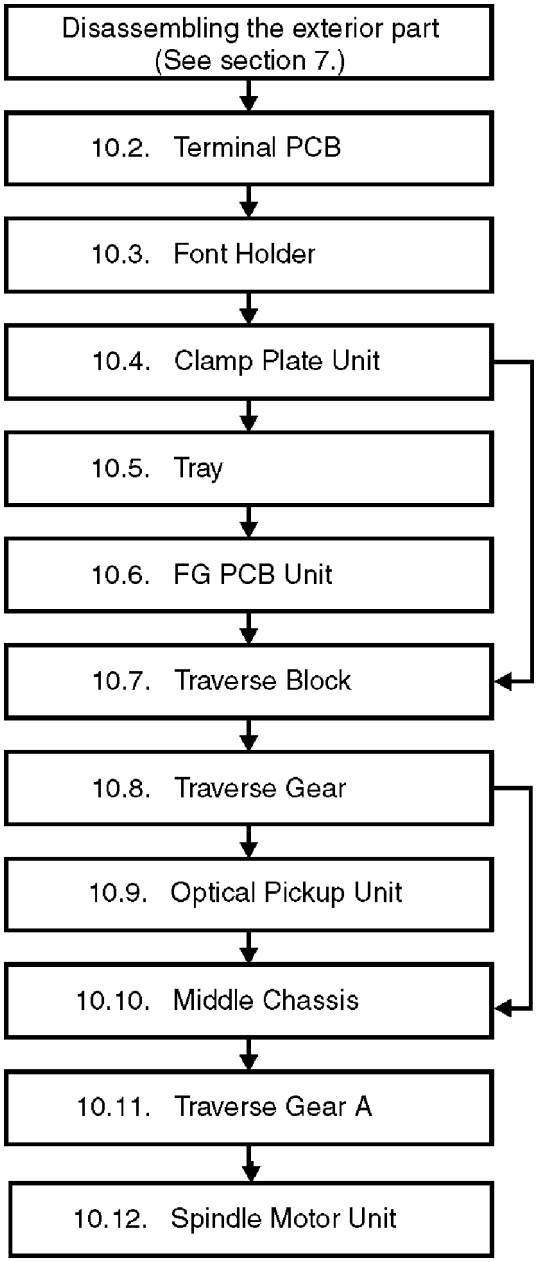


Note:
Set the VCR/ DVD/ TV Select Switch on the Remote Controller to VCR position.

INDICATION	CAUSE	REMEDY/CHECK
01	After cylinder lock is detected, the cylinder does not start rotating again even after tape unloading.	Check the cylinder motor drive circui
02	Cassette tape is not wound up during the tape unloading except EJECT mode.	Check the capstan motor drive circui
03	Mechanism locks during mode transition except EJECT mode.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment. 3. Check the mode switch.
04	Mechanism locks during tape unloading.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment.
06	Mechanism locks after tape unloading in EJECT mode.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment for cass
07	During recording mode, recording signal is less than the normal condition.	Protection of the over-current flowin transistor which produces the power for recording mode.
08	Recording circuit works except recording mode.	Check the recording circuit.
16	Cylinder lock detection.	Check the cylinder unit and the cylin drive circuit.
17	Supply reel mechanism lock detection	Check the supply reel mechanism an supply reel circuit.
18	Take-up reel mechanism lock detection	Check the Take-up reel mechanism a Take-up reel circuit.
2*	PG shifter automatic adjustment error.	Check the servo/system control circu cylinder unit.

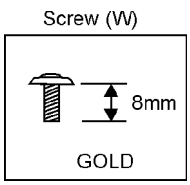
10. ASSEMBLING AND DISASSEMBLING THE MECHANISM UNIT

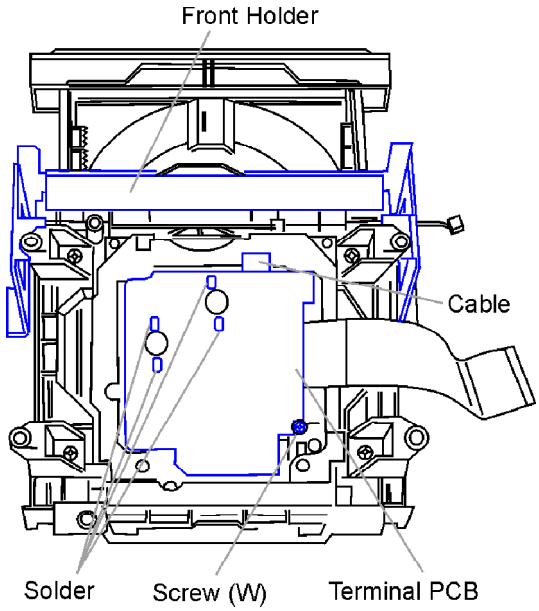
10.1. DISASSEMBLY PROCEDURE



10.2. TERMINAL PCB UNIT

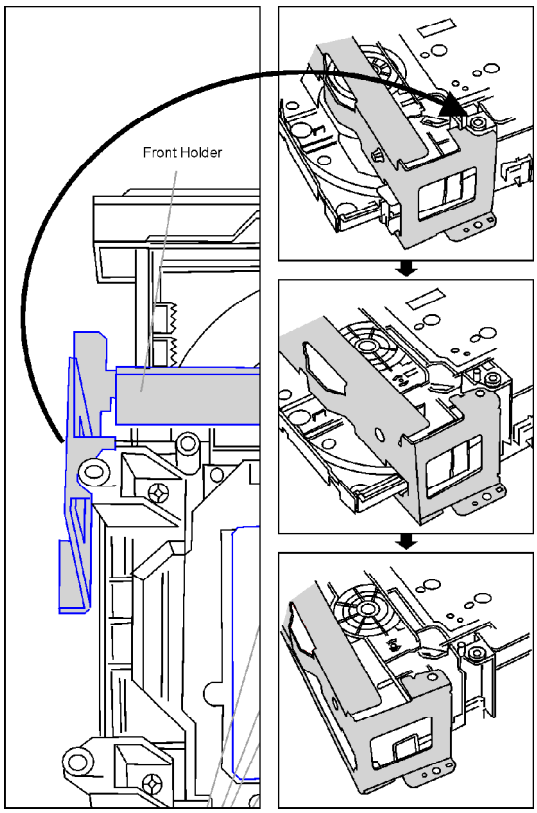
1. **Unscrew the Screw.**
2. **Remove the Solder.**
3. **Remove the Cable.**
4. **Remove the Terminal PCB Unit.**





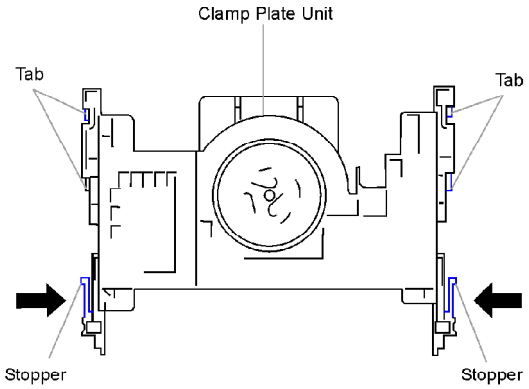
10.3. FRONT HOLDER

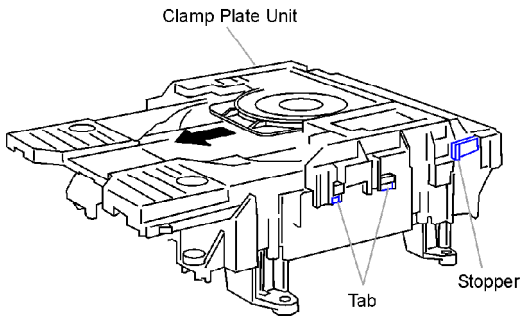
1. Remove the Front Holder



10.4. CLAMP PLATE UNIT

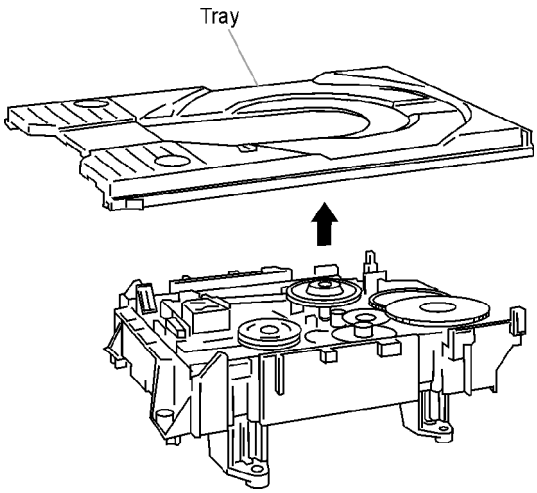
1. Push the stopper with hand to slide the tabs and remove the clamp plate unit.





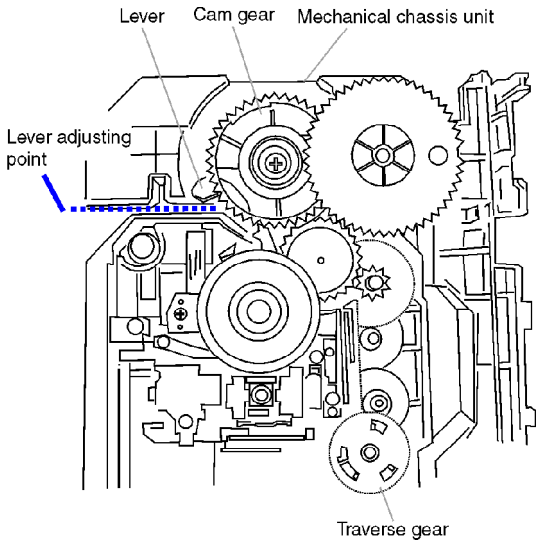
10.5. TRAY

1. Lift the tray.

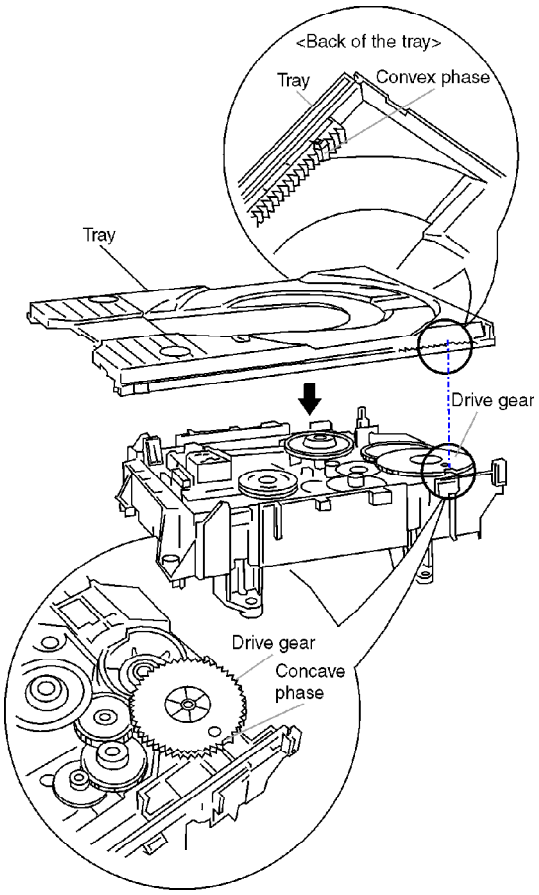


<Precautions in reassembling the tray>
Reassemble the tray so that it is in the backmost position.

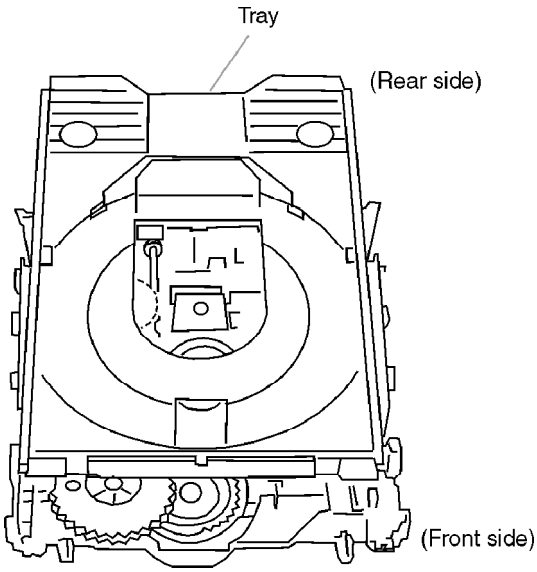
1. Turn traverse gear until cam gear leaver comes to the lever adjusting position at the end of mechanical chassis unit.



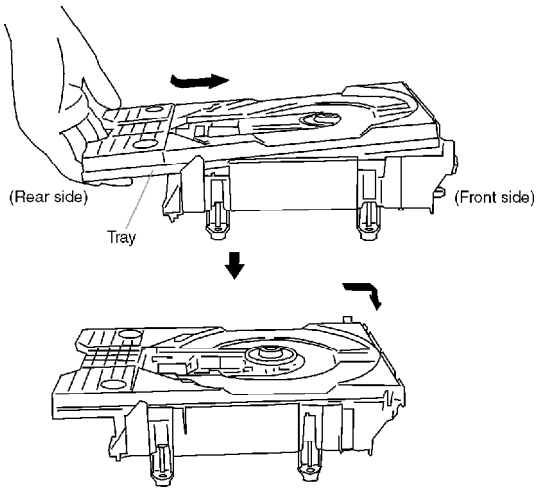
2. Check the position of convex phase on back of the tray, and that of concave phase on drive gear.



A. Place the tray on the unit from rearward.

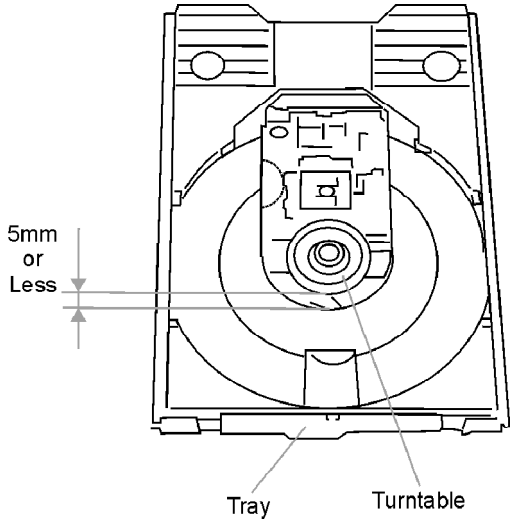


B. Inch the tray frontward until convex phase and concave phase mate.



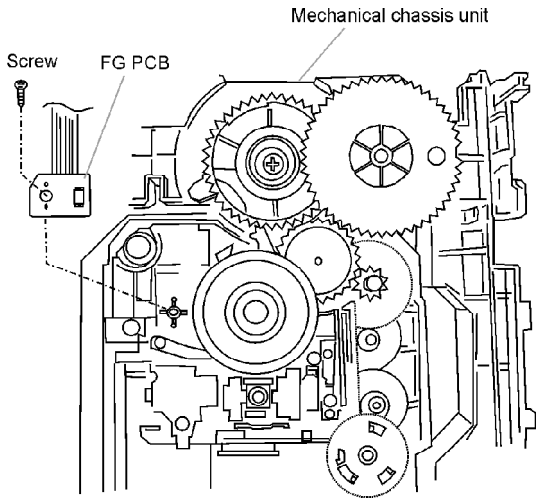
Caution:

Make sure to mate convex phase and concave phase properly, so that the gap between turntable and tray becomes 5mm or less.



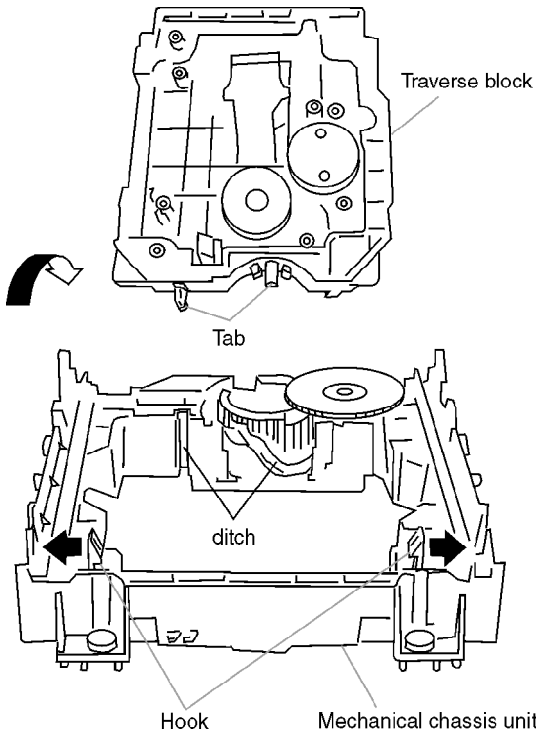
10.6. FG PCB UNIT

1. Unscrew the screw.
2. Remove the FG PCB Unit.



10.7. TRAVERSE BLOCK

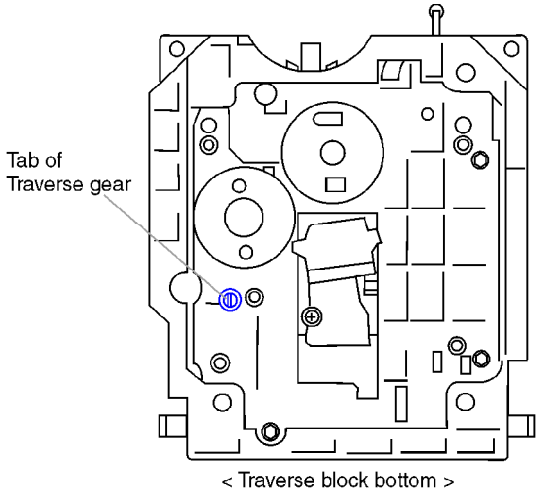
1. Lift the traverse block while spreading the hook of the mechanical chassis unit.
2. Disengage the tabs from the holes of the mechanical chassis unit.



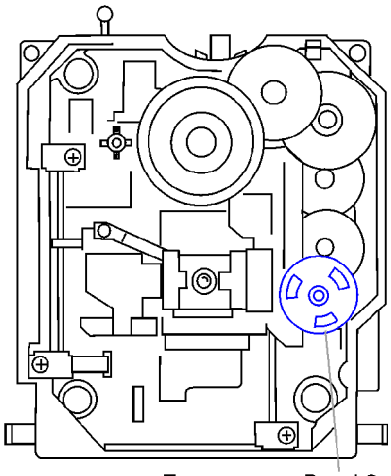
10.8. TRAVERSE GEAR

1. Disengage the tabs from the traverse gear.

2. Remove the traverse gears B and C.



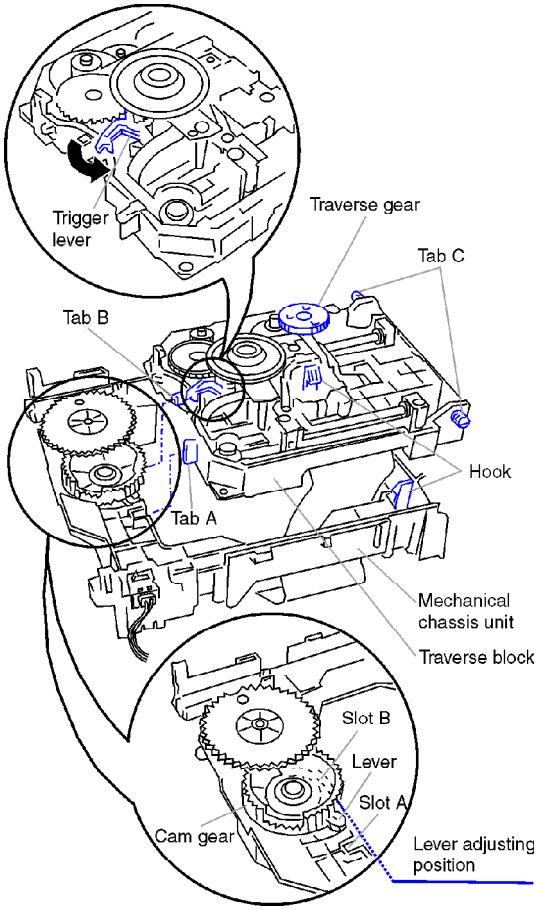
< Traverse block bottom >



<Precautions in reassembling the traverse block>

● **Take the following precautions when reassembling the traverse block.**

1. **Turn traverse gear on the traverse block to let trigger lever turn rightward. (Front view)**
2. **Bring cam gear lever to the lever adjusting position at the end of mechanical chassis unit.**
3. **Put tabs A and B into slots A and B respectively.**
   Place tabs C into hooks to mount the traverse block on mechanical chassis unit. (Slot A... Mechanical chassis unit, Slot B... Cam gear)

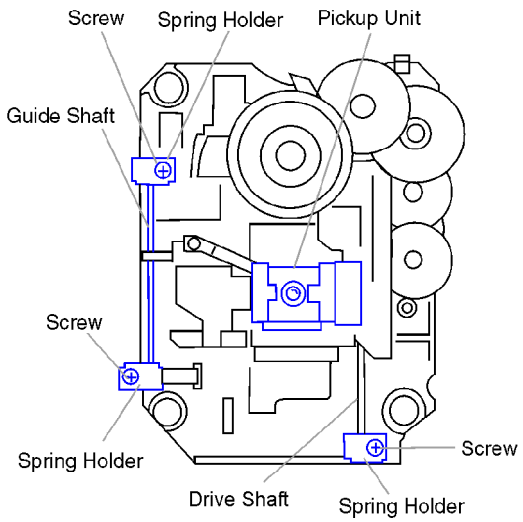


10.9. OPTICAL PICKUP UNIT

1. Unscrew the screws.

2. Remove the spring holders and the springs.

3. Pull out the drive shaft and guide shaft.



10.9.1. PRECAUTIONS IN OPTICAL PICKUP REPLACEMENT

The optical pickup can be damaged by static electricity from your body. Be sure to take static electricity countermeasures when working around the optical pickup. (Refer to the related page in this Manual about the countermeasures.)

1. Do not touch laser diode, actuator and their peripheries.

2. Do not use tester to check laser diode. (Laser diode can be damaged easily.)

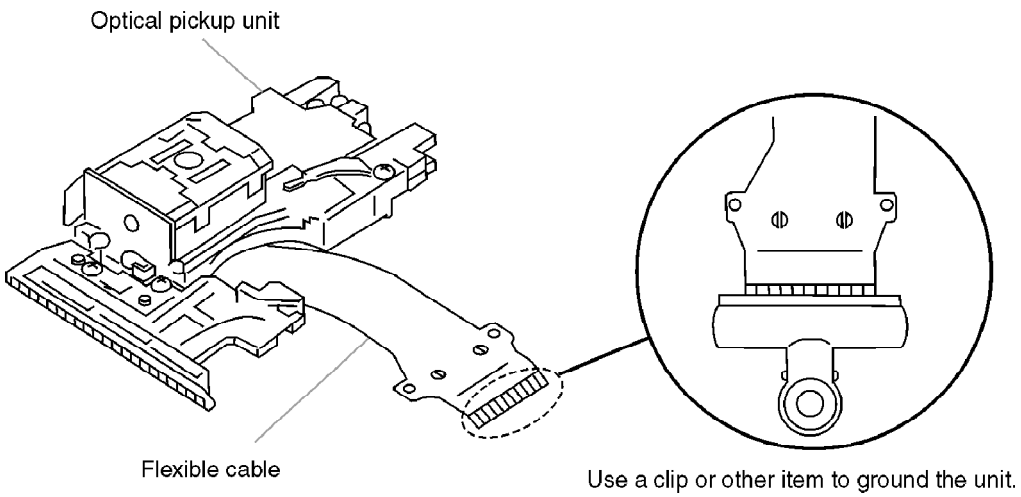
3. The use of soldering iron with anti-static feature is recommended when providing short-circuit to laser diode or when removing it.

4. Solder the land on flexible cable of optical pickup unit.

Caution

- When using the soldering iron without anti-static feature, short-circuit the flexible cable terminal with a clip before short-circuiting the land.

- After intended repair is finished, remove the solder for short-circuit of laser diode in a correct way following the procedures described in this Manual.



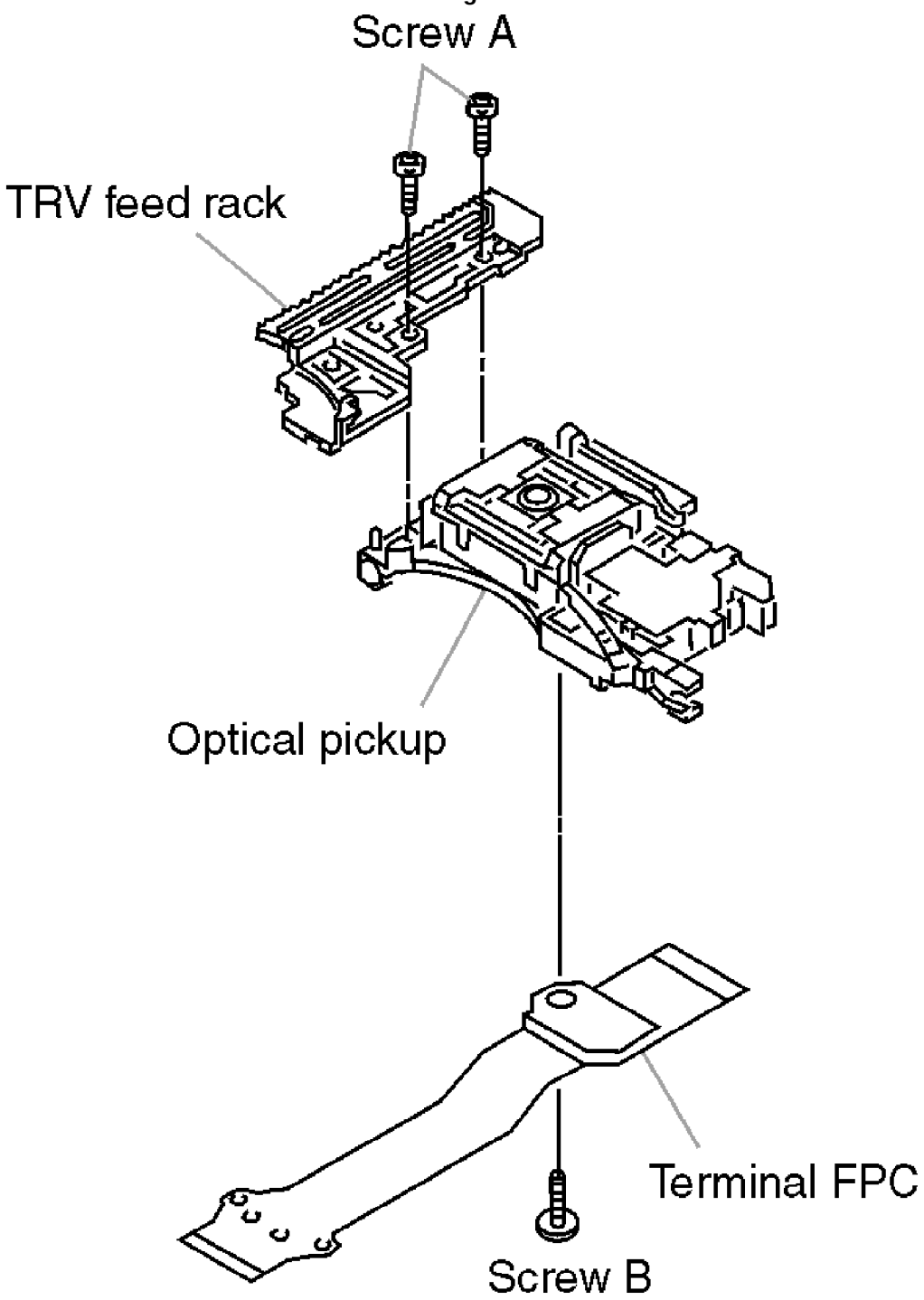
10.9.2. DISASSEMBLING THE OPTICAL PICKUP UNIT

1. Remove the 2 screws A and remove the TRV feed rack.

2. Remove the screw B and remove the Terminal FPC.

3. Remove the optical pickup.

Fig. 1



10.9.3. CAUTIONS TO BE TAKEN WHEN REPLACING THE OPTICAL PICKUP

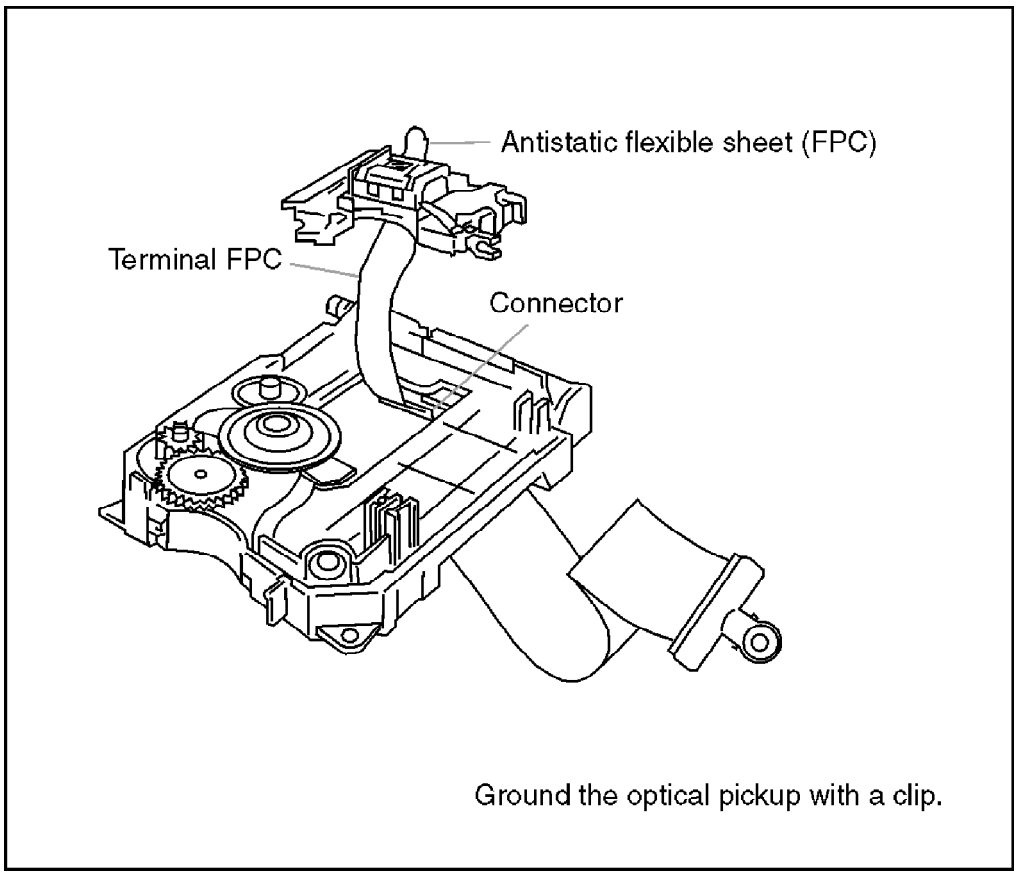
- An antistatic flexible sheet (FPC) is connected with the new optical pickup.
Replace the optical pickup according to the following procedure.

1. Install the Terminal FPC, TRV feed rack on the optical pickup. (See

Fig. 1)

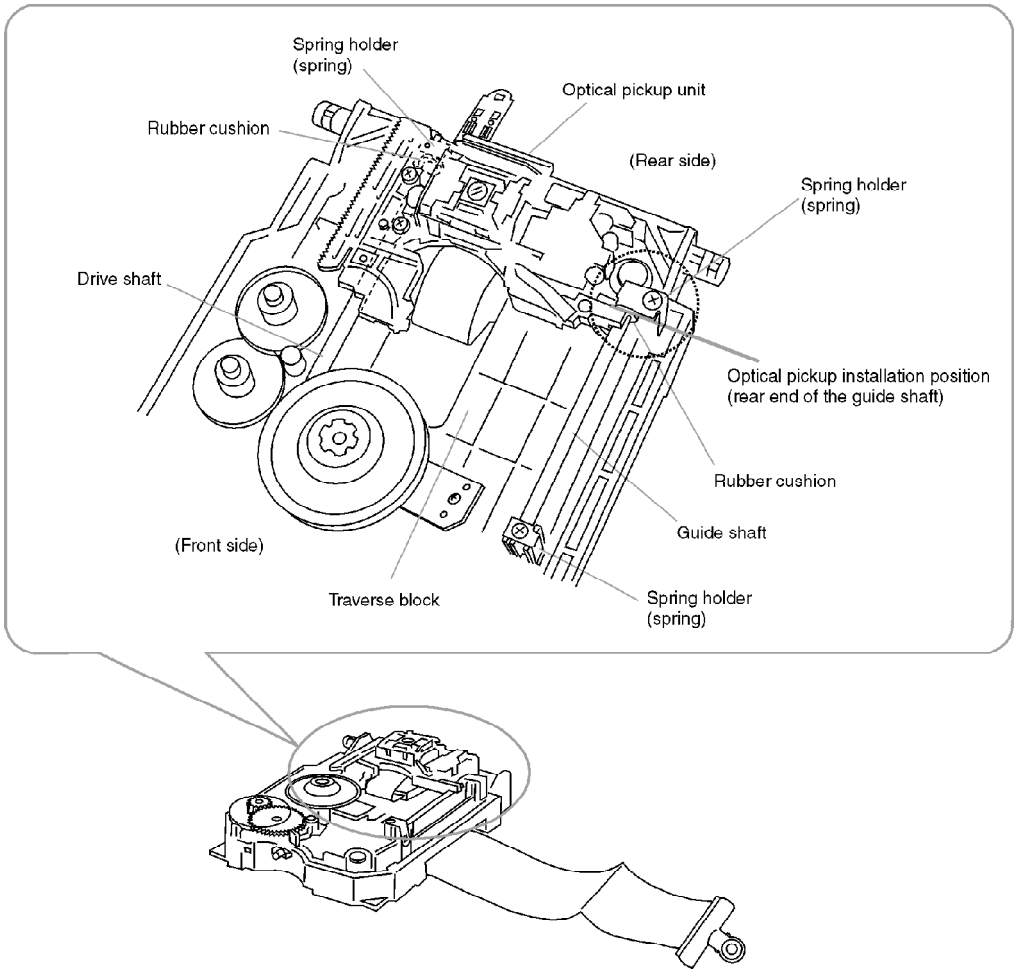
2. Install the Terminal FPC in the connector on the Intermediate PCB.

Fig. 2



3. Install the optical pickup unit, spring, drive shaft, guide shaft, rubber cushion, and spring holder on the traverse block.

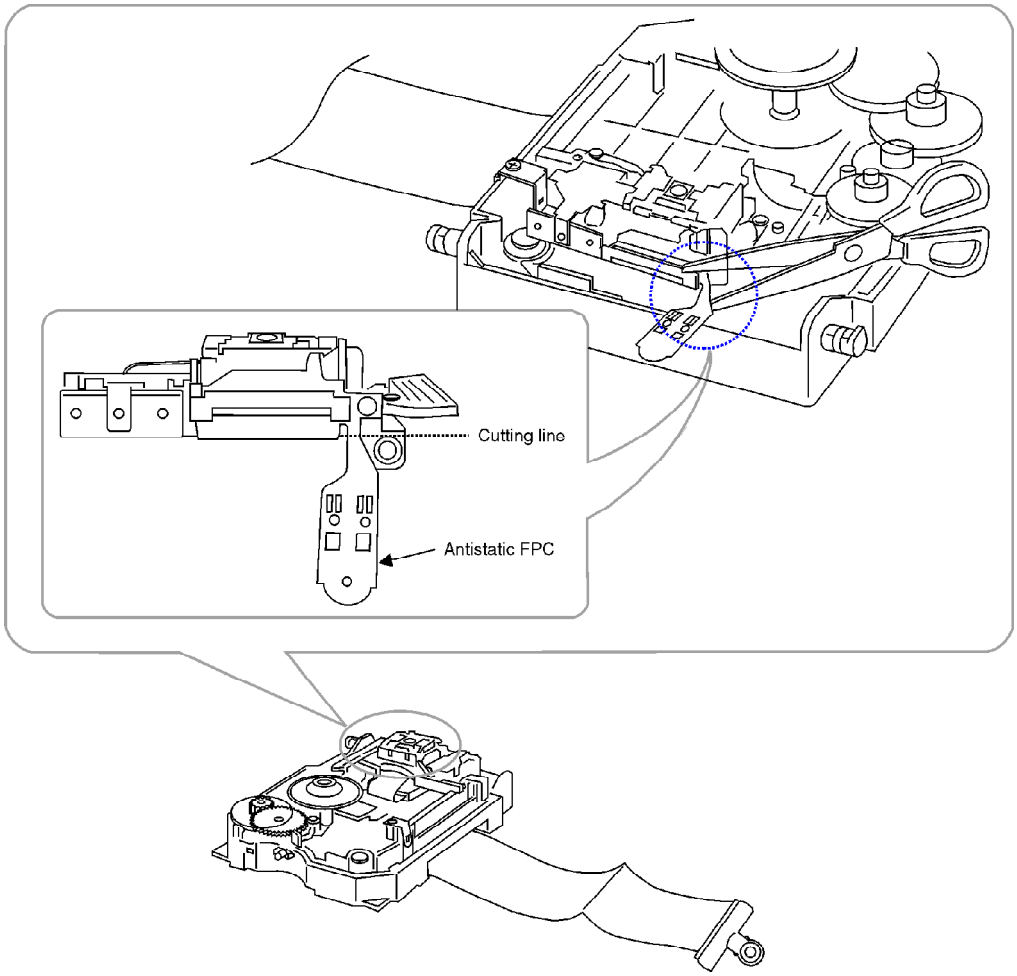
Fig. 3



Cautions to be taken when assembling the unit: Install the pickup unit so that it is located at the rear end of the guide shaft.

4. Cut the antistatic flexible sheet for the optical pickup unit.

Fig. 4

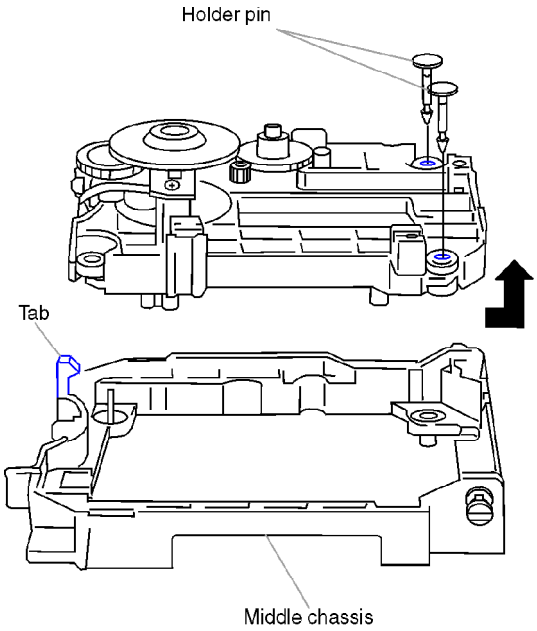


10.10. DISASSEMBLING THE MIDDLE CHASSIS

1. Remove the holder pins.

2. Remove the tab.

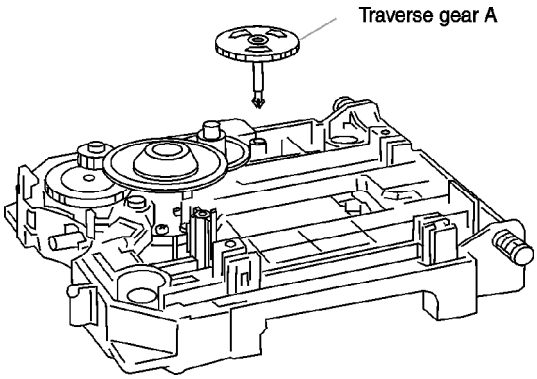
3. It lifts while pulling it in the direction of the arrow.



10.11. DISASSEMBLING THE TRAVERSE

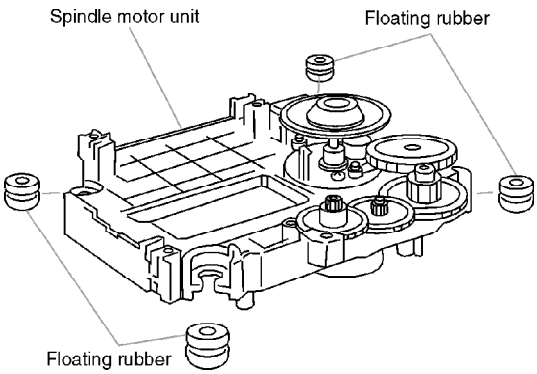
1. Unscrew the screw.

2. Remove the traverse gear A.



10.12. DISASSEMBLING THE SPINDLE MOTOR UNIT

1. Remove the floating rubbers.



11. ADJUSTMENT PROCEDURES

11.1. SERVICE TOOLS AND EQUIPMENT

Application	Name	Number
Tilt adjustment	DVD test disc	DVDT-S15 or DVDT-S01
	Hex wrench	Available on sales route.
Inspection	Extension cable (13pins) PS1301 (Power PCB) - P1001 (AV Main PCB)	VFK1876
	Extension cable (22pins) PS8002 (AV Decoder PCB) - P4301 (AV Main PCB)	JGS0116
	Extension cable (6pins) PP7501 (Front Switch PCB) - PS7502 (AV Main PCB)	VFK1874
	Extension cable (10pins) PP4801 (Front Jack PCB) - PS7501 (AV Main PCB)	VFK1875
	Extension cable (14pins) PS8001 (AV Decoder PCB) - PP1302 (Power PCB)	VUC8026
	DVD unit adjustment stand 1	VFK1727
Others	Screw lock	RZZ0L01
	Grease 1	RFKXGAK152
	Grease 2	RFKXPG641
	Oil (1)	RFKXGA1280
Confirmation	CD test disc	PVCD-K06 or any other commercia available disc
	VCD test disc	PVCD-K06 or any other commercia available disc

11.2. IMPORTANT POINTS IN ADJUSTMENT

11.2.1. IMPORTANT POINTS IN OPTICAL ADJUSTMENT

- Before starting optical adjustment, be sure to take anti-static measures.

- Optical pickup tilt adjustment is needed after replacement of the following components.

1. Optical pickup unit

2. Spindle motor unit

3. Optical pickup peripheral parts (such as rail)

Notes
Adjustment is generally unnecessary after replacing other parts of the traverse unit. However, make adjustment if there is a noticeable degradation in picture quality. Optical adjustments cannot be made inside the optical pickup. Adjustment is generally unnecessaryafter replacing the traverse unit.

11.2.2. IMPORTANT POINTS IN ELECTRICAL ADJUSTMENT

- Follow the adjustment procedures described in this Manual.

11.3. STORING AND HANDLING TEST DISCS

- Surface precision is vital for DVD test discs. Be sure to store and handle them carefully.

1. Do not place discs directly onto the workbench, etc., after use.

2. Handle discs carefully in order to maintain their flatness. Place them into their case after use and store them vertically. Store discs in a cool place where they are not exposed to direct sunlight or air from air conditioners.

3. Accurate adjustment will not be possible if the disc is warped when placed on a surface made of glass, etc. If this happens, use a new test disc to make optical adjustments.

4. If adjustment is done using a warped disc, the adjustment will be incorrect and some discs will not be playable.

11.4. OPTICAL ADJUSTMENT

11.4.1. OPTICAL PICKUP TILT ADJUSTMENT

Measurement point	Adjustment point	Mode	Disc
	Tangential adjustment screw Tilt adjustment screw	T01 (inner periphery) play T43 (outer periphery) play	DVDR-S15 or DVD
Measuring equipment		Adjustment value	
None (Main unit display for servicing is used.)		Adjust to the minimum jitter value.	

11.4.1.1. ADJUSTMENT PROCEDURE

1. While pressing PAUSE and OPEN/CLOSE buttons on the main unit, press "5" on the remote control unit.

2. Confirm that "J_xxx_yyy_zz" is shown on the front display.

For your information:

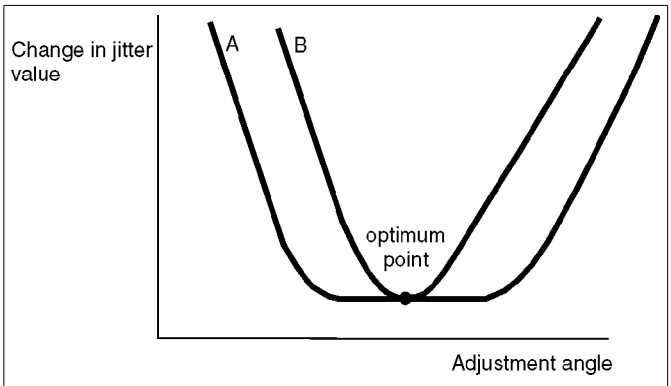
"yyy" and "zz" shown to the right have nothing to do with the jitter value. "yyy" is the error counter, while "zz" is the focus drive value.

Note:
Jitter value appears on the front display.

3. **Play test disc T01 (inner periphery).**
4. **Adjust tangential adjustment screw so that the jitter value is minimized.**
5. **Play test disc T43 (outer periphery).**
6. **Adjust tilt adjustment screw 1 so that the jitter value is minimized.**
7. **Play test disc T43 (outer periphery).**
8. **Adjust tilt adjustment screw 2 so that the jitter value is minimized.**
9. **Repeat adjusting tilt adjustment screws 1 and 2 alternately until the jitter value is minimized.**

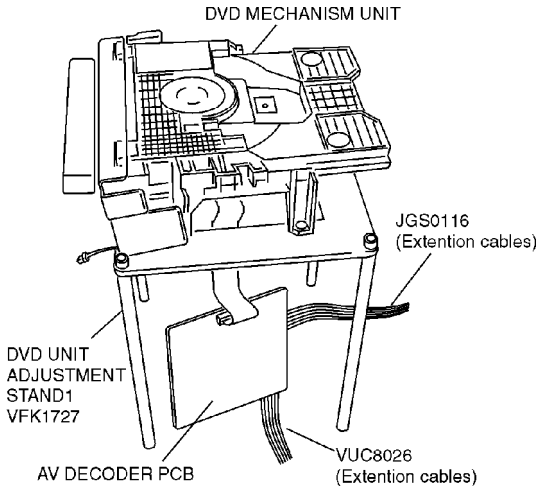
11.4.1.2. IMPORTANT POINTS

1. **Make tangential adjustment first, and then make tilt adjustment.**
2. **Repeat adjusting two or three times to find the optimum point.**
3. **Finish the procedure with tilt adjustment.**

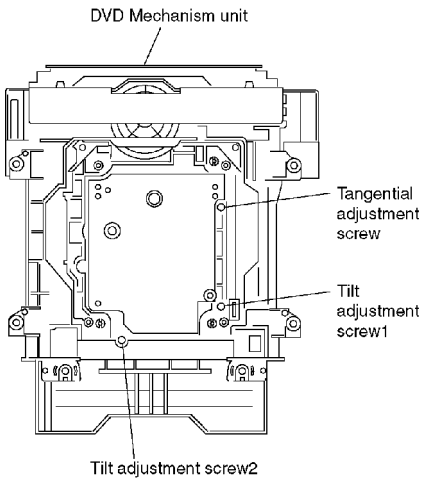


Jitter value depends on the model:

1. If the jitter value changes like B, the optimum point is easy to find.
2. If the jitter value changes like A, set the optimum point near the middle.



Note:
When adjust Tilt adjustment screw 2, turn the DVD unit slightly so that the Tilt adjustment screw 2 could be adjusted.

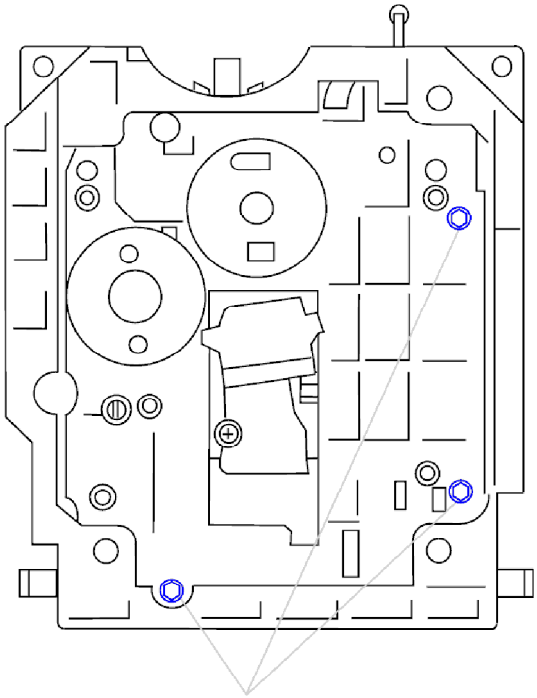


11.4.1.3. CHECK AFTER ADJUSTMENT

Play test disc or any other disc to make sure there is no picture degradation in the inner, middle and outer peripheries, and no audio skipping. After adjustment is finished, lock each adjustment screw in position using screw lock.

11.4.1.4. PROCEDURE FOR SREW LOCK

1. **After adjustment, remove top panel, tray, clamper base and traverse unit in this sequence.**
2. **Lay the traverse unit upside down, and fix adjustment screw with screw lock.**
3. **After fixing, reassemble traverse unit, clamper base, tray and top panel.**



Screw lock
(Adjustment screw)

11.5. VCR ELECTRICAL ADJUSTMENT PROCEDURES

11.5.1. TEST EQUIPMENT

The following equipments are required for Electrical Adjustments.

1. Dual-Trace Oscilloscope

- **Voltage Range: 0.005-5V/div**
- **Frequency Range: DC-35MHz**
- **Probes: 10:1 / 1:1**

2. Frequency Counter

- **Frequency Range: 0-10MHz**
- **Probes: 1:1**

3. Universal Counter

4. Digital Volt Meter (D.V.M.)

5. Video Sweep Generator

6. Sinewave Generator

7. Video Pattern Generator

8. Monitor TV

9. DC Power Supply

10. VHS Blank Tape

11. VHS Alignment Tape

- Parts No.: VFJ8125H3F(PAL)

11.5.2. VCR SETTING

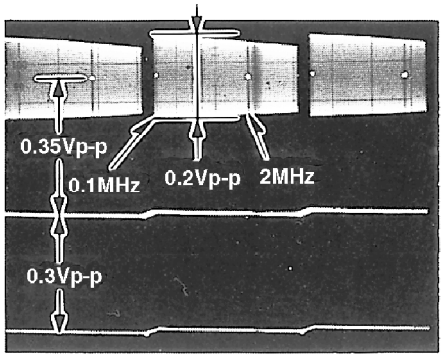
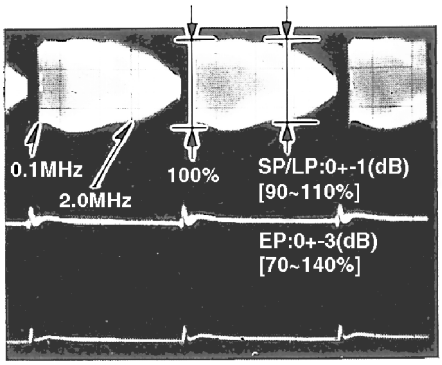
When no indication in the procedure, set each selector as follows.

1. TAPE SPEED: SP

2. CHANNEL: AV1/AV2
(Set to signal input terminal number)

11.5.3. ADJUSTMENTS

ITEM	TP	ADJ.	MODE	INPUT	TAPE	M. EQ.	SPEC	REMA
PG SHIFTER ADJUSTMENT	---	---	PLAYBACK	---	ALIGNMENT TAPE (PAL)	---	---	Refer to proc PG SHIFTER ADJUSTMEN shown in Fig
VIDEO FREQUENCY RESPONSE ADJUSTMENT	VIDEO OUT	---	SP/LP/EP PLAYBACK (SELF-REC)	VIDEO SWEEP (See Fig. E1)	BLANK TAPE	OSCILLO SCOPE/ VIDEO SWEEP GENERAT OR	SP: 0+-1 (dB) (90~110%) LP: 0+-1 (dB) (90~110%) EP: 0+-3 (dB) (70~140%) (See Fig. E2)	Refer to the procedure of VIDEO FREQ RESPONCE ADJUSTMEN as shown in

Fig.E1	Fig.E2
	

CONDITION: BURST SIGNAL OFF /
75 ohm TERMINATED

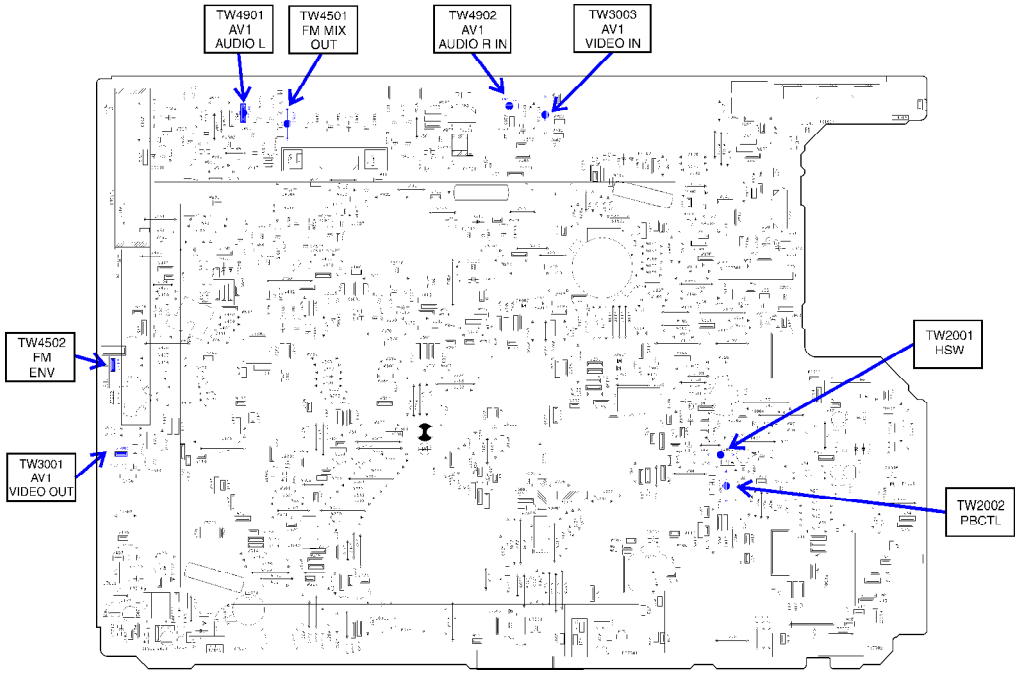
11.5.4. PG SHIFTER ADJUSTMENT(AUTOMATIC)

PROCEDURES	FIP DISPLAY
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP key once.	
Insert the Alignment cassette tape. (PAL:VFJ8125H3F)	
When the sequence of the automatical adjustment has been terminated, the following action has been made. *SUCCEED: The cassette tape is ejected. *ERROR : The "F2"isdisplayed on the FIP. (Check the Servo/Syscon circuit and Cylinder unit.)	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

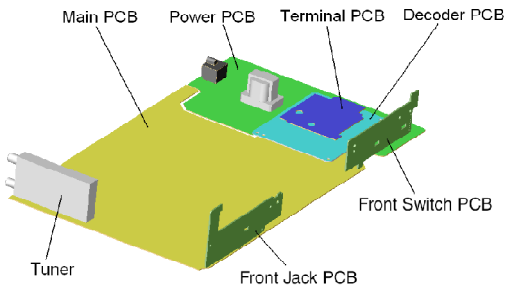
11.5.5. VIDEO FREQUENCY RESPONSE ADJUSTMENT

PROCEDURES	FIP DISPLAY
Input the Video sweep signal. (See Fig.E1)	
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP and/or CH DOWN key until "11" is displayed on FIP.	
Insert the Self-recorded tape and playback it. (SP/LP/EP mode)	
Connect the Oscilloscope to: *CH1....Video Out (TW3002).	
Press the "4" key on the remote controller. (Confirm that TW6002 becomes high(5V)).	
Adjust the Frequency response by pressing the "2"(increase) and/or "8"(decrease) key on the Remote Controller. (See Fig.E2)	
Store the Adjusted value by pressing the "5" key on the Remote Controller.	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

11.5.6. LOCATION OF TEST POINTS& CONTROLS (MAIN PCB)



11.5.7. CIRCUIT BOARD LAYOUT



12. ABBREVIATIONS

INITIAL/LOGO		ABBREVIATIONS
A	A0~UP	ADDRESS
	ACLK	AUDIO CLOCK
	AD0~UP	ADDRESS BUS
	ADATA	AUDIO PES PACKET DATA
	ALE	ADDRESS LATCH ENABLE
	AMUTE	AUDIO MUTE
	AREQ	AUDIO PES PACKET REQUEST
	ARF	AUDIO RF
	ASI	SERVO AMP INVERTED INPUT
	ASO	SERVOAMPOUTPUT
	ASYNC	AUDIO WORD DISTINCTION SYNC
B	BCK	BIT CLOCK (PCM)
	BCKIN	BIT CLOCK INPUT
	BDO	BLACK DROP OUT
	BLKCK	SUB CODE BLOCK CLOCK
	BOTTOM	CAP. FOR BOTTOM HOLD
	BYP	BYPATH
	BYTCK	BYTE CLOCK
C	CAV	CONSTANT ANGULAR VELOCITY
	CBDO	CAP. BLACK DROP OUT
	CD	COMPACT DISC
	CDSCK	CD SERIAL DATA CLOCK
	CDSRDATA	CD SERIAL DATA
	CDRF	CD RF (EFM) SIGNAL
	CDV	COMPACT DISC-VIDEO
	CHNDATA	CHANNEL DATA
	CKSL	SYSTEMCLOCKSELECT
	CLV	CONSTANT LINEAR VELOCITY
	COFTR	CAP. OFF TRACK
	CPA	CPU ADDRESS
	CPCS	CPU CHIP SELECT
	CPDT	CPU DATA
	CPUADR	CPU ADDRESS LATCH
	CPUADT	CPU ADDRESS DATA BUS
	CPUIRQ	CPU INTERRUPT REQUEST
	CPRD	CPU READ ENABLE
	CPWR	CPU WRITE ENABLE
	CS	CHIPSELECT
	CSYNCIN	COMPOSITESYNC IN
	CSYNCOUT	COMPOSITE SYNC OUT

INITIAL/LOGO		ABBREVIATIONS
D	DACCK	D/A CONVERTER CLOCK
	DEEMP	DEEMPHASIS BIT ON/OFF
	DEMPH	DEEMPHASIS SWITCHING
	DIG0~UP	FL DIGIT OUTPUT
	DIN	DATA INPUT
	DMSRCK	DM SERIAL DATA READ CLOCK
	DMUTE	
	DO	DIGITAL MUTE CONTROL
	DOUT0~UP	DROPOUT
		DATAOUTPUT
	DRF	DATA SLICE RF (BIAS)
	DRPOUT	DROP OUT SIGNAL
	DREQ	DATA REQUEST
	DRESP	DATA RESPONSE
	DSC	DIGITAL SERVO CONTROLLER
	DSLF	DATA SLICE LOOP FILTER
	DVD	DIGITAL VIDEO DISC
E	EC	ERROR TORQUE CONTROL
	ECR	ERROR TORQUE CONTROL REFERENCE
	ENCSEL	ENCODER SELECT
	ETMCLK	EXTERNAL M CLOCK (81MHz/ 40.5MHz)
	ETSCLK	EXTERNAL S CLOCK (54MHz)
F	FBAL	FOCUS BALANCE
	FCLK	FRAME CLOCK
	FE	FOCUS ERROR
	FFI	FOCUS ERROR AMP INVERTED INPUT
	FEO	FOCUS ERROR AMP OUTPUT
	FG	FREQUENCY GENERATOR
	FSC	FREQUENCY SUB CARRIER
	FSCK	FS (384 OVER SAMPLING)CLOCK
G	GND	COMMON GROUNDING (EARTH)
H	HA0~UP	HOST ADDRESS
	HD0~UP	HOST DATA
	HINT	HOST INTERRUPT
	HRXW	HOST READ/WRITE
I	IECOUT	IEC958 FORMAT DATA OUTPUT
	IPFRAG	
	IREF	INTERPOLATION FLAG
	ISEL	I (CURRENT) REFERENCE
		INTERFACE MODE SELECT

INITIAL/LOGO		ABBREVIATIONS
L	LDON	LASER DIODE CONTROL
	LPC	LASER POWER CONTROL
	LRCK	L CH/R CH DISTINCTION CLOCK
M	MA0~UP	MEMORY ADDRESS
	MCK	MEMORY CLOCK
	MCKI	MEMORY CLOCK INPUT
	MCLK	MEMORY SERIAL COMMAND CLOCK
	MDATA	MEMORY SERIAL COMMAND DATA
	MDQ0~UP	MEMORY DATA INPUT/OUTPUT
	MDQM	MEMORY DATA I/O MASK
	MLD	MEMORYSERIALCOMMAND LOAD
	MPEG	MOVING PICTURE EXPERTS GROUP
O	ODC	OPTICAL DISC CONTROLLER
	OFTR	OFF TRACKING
	OSCI	OSCILLATOR INPUT
	OSCO	OSCILLATOR OUTPUT
	OSD	ON SCREEN DISPLAY
P	P1~UP	PORT
	PCD	CD TRACKING PHASE DIFFERENCE
	PCK	PLL CLOCK
	PDVD	DVD TRACKING PHASE DIFFERENCE
	PEAK	CAP. FOR PEAK HOLD
	PLLCLK	CHANNEL PLL CLOCK
	PLLOK	PLL LOCK
	PWMCTL	PWM OUTPUT CONTROL
	PWMDA	PULSE WAVEMOTOR DRIVEA
	PWMOA, B	PULSE WAVE MOTOR OUT A, B
R	RE	READ ENABLE
	RFENV	RF ENVELOPE
	RFO	RF PHASE DIFFERENCE OUTPUT
	RS	(CD-ROM) REGISTER SELECT
	RSEL	RF POLARITY SELECT
	RST	RESET
	RSV	RESERVE

INITIAL/LOGO		ABBREVIATIONS
S	SBI0, 1	SERIAL DATA INPUT
	SBO0	SERIAL DATA OUTPUT
	SBT0, 1	SERIAL CLOCK
	SCK	SERIAL DATA CLOCK
	SCKR	AUDIO SERIAL CLOCK
	SCL	RECEIVER
	SCLK	SERIAL CLOCK
	SDA	SERIAL CLOCK
	SEG0~UP	SERIAL DATA
	SELCLK	FL SEGMENT OUTPUT
	SEN	SELECTCLOCK
	SIN1, 2	SERIALPORT ENABLE
	SOUT1, 2	SERIAL DATA IN
	SPDI	SERIAL DATA OUT
	SPDO	SERIAL PORT DATA INPUT
	SPEN	SERIAL PORT DATA OUTPUT
	SPRCLK	SERIAL PORT R/W ENABLE
	SPWCLK	SERIAL PORT READ CLOCK
	SQCK	SERIAL PORT WRITE CLOCK
	SQCX	SUB CODE Q CLOCK
	SRDATA	SUBCODEQ DATA READ
	SRMADR	CLOCK
	SRMDT0~7	SERIAL DATA
		SRAM ADDRESS BUS
	SS	SRAM DATA BUS 0~7
	STAT	START/STOP
	STCLK	STATUS
	STD0~UP	STREAM DATA CLOCK
	STENABLE	STREAM DATA
		STREAM DATA INPUT ENABLE
	STSEL	STREAM DATA POLARITY
	STVALID	SELECT
	SUBC	STREAMDATAVALIDITY
	SBCK	SUB CODE SERIAL
	SUBQ	SUB CODE CLOCK
	SYSCLK	SUB CODE Q DATA
		SYSTEM CLOCK

INITIAL/LOGO		ABBREVIATIONS
T	TE	TRACKING ERROR
	TIBAL	BALANCE CONTROL
	TID	BALANCE OUTPUT 1
	TIN	BALANCE INPUT
	TIP	BALANCE INPUT
	TIS	BALANCE OUTPUT 2
	TPSN	OP AMP INPUT
	TPSO	OP AMP OUTPUT
	TPSP	OP AMP INVERTED INPUT
	TRCRS	TRACKCROSSSIGNAL
	TRON	TRACKING ON
	TRSON	TRAVERSE SERVO ON
V	VBLANK	V BLANKING
	VCC	COLLECTOR POWER SUPPLY VOLTAGE
	VCDCONT	VIDEO CD CONTROL (TRACKING
	VDD	BALANCE)
	VFB	DRAIN POWER SUPPLY
	VREF	VOLTAGE
	VSS	VIDEO FEED BACK VOLTAGE REFERENCE SOURCE POWERSUPPLYVOLTAGE
W	WAIT	BUS CYCLE WAIT
	WDCK	WORD CLOCK
	WEH	WRITE ENABLE HIGH
	WSR	WORD SELECT RECEIVER

INITIAL/LOGO		ABBREVIATIONS
X	X	X' TAL
	XALE	X ADDRESS LATCH ENABLE
	XAREQ	X AUDIO DATA REQUEST
	XCDROM	X CD ROM CHIP SELECT
	XCS	X CHIP SELECT
	XCSYNC	X COMPOSITE SYNC
	XDS	X DATA STROBE
	XHSYNCO	X HORIZONTAL SYNC OUTPUT
	XHINT	XHINTERRUPTREQUEST
	XI	X' TAL OSCILLATOR INPUT
	XINT	X INTERRUPT
	XMW	X MEMORY WRITE ENABLE
	XO	X' TAL OSCILLATOR OUTPUT
	XRE	X READ ENABLE
	XSRMCE	X SRAM CHIP ENABLE
	XSRMOE	X SRAM OUTPUT ENABLE
	XSRMWE	X SRAM WRITE ENABLE
	XVCS	XV-DEC CHIPSELECT
	XVDS	X V-DEC CONTROL BUS
	XVSYNCO	STROBE
		X VERTICAL SYNC OUTPUT

[VCR SECTION]

13. INPUT/ OUTPUT CHART

13.1. INPUT/ OUTPUT CHART FOR IC6001

13.2. TRUTH TABLE (EC/EP/EF MODEL)

13.3. TRUTH TABLE (EB/EBL MODEL)

14. WAVEFORM TABLE

14.1. WAVEFORM

15. VOLTAGE CHART

16. INTERCONNECTION DIAGRAM

17. BLOCK DIAGRAM

17.1. POWER SUPPLY BLOCK DIAGRAM

17.2. VCR LUMINANCE& CHROMINANCE BLOCK DIAGRAM

17.3. VCR AUDIO BLOCK DIAGRAM

17.4. SYSCON& SERVO BLOCK DIAGRAM

17.5. DVD VIDEO BLOCK DIAGRAM

17.6. DVD OVERALL BLOCK DIAGRAM

17.7. DVD SERVO BLOCK DIAGRAM

17.8. DVD AUDIO BLOCK DIAGRAM

18. SCHEMATIC DIAGRAM

18.1. POWER PCB

18.2. MAIN PCB

18.3. MAIN PCB - I/O SECTION

18.4. MAIN PCB - SYSCON& SERVO

18.5. AV DECODER PCB

18.6. FRONT PANEL PCB

18.7. TERMINAL PCB

18.8. TV DEMODULATOR PACK (NV-VP25EC/ 30EC/ 30EB/ 30EBL/ 30EP)

18.9. TV DEMODULATOR PACK (NV-VP30EF)

18.10. VCR MECHANISM - CAPSTAN PCB/ CYLINDER STATOR PCB

19. PRINT CIRCUIT BOARD

19.1. MAIN PCB

19.2. DECODER PCB

19.3. POWER PCB

19.4. FRONT JACK PCB/ FRONT SWITCH PCB

19.5. TERMINAL PCB

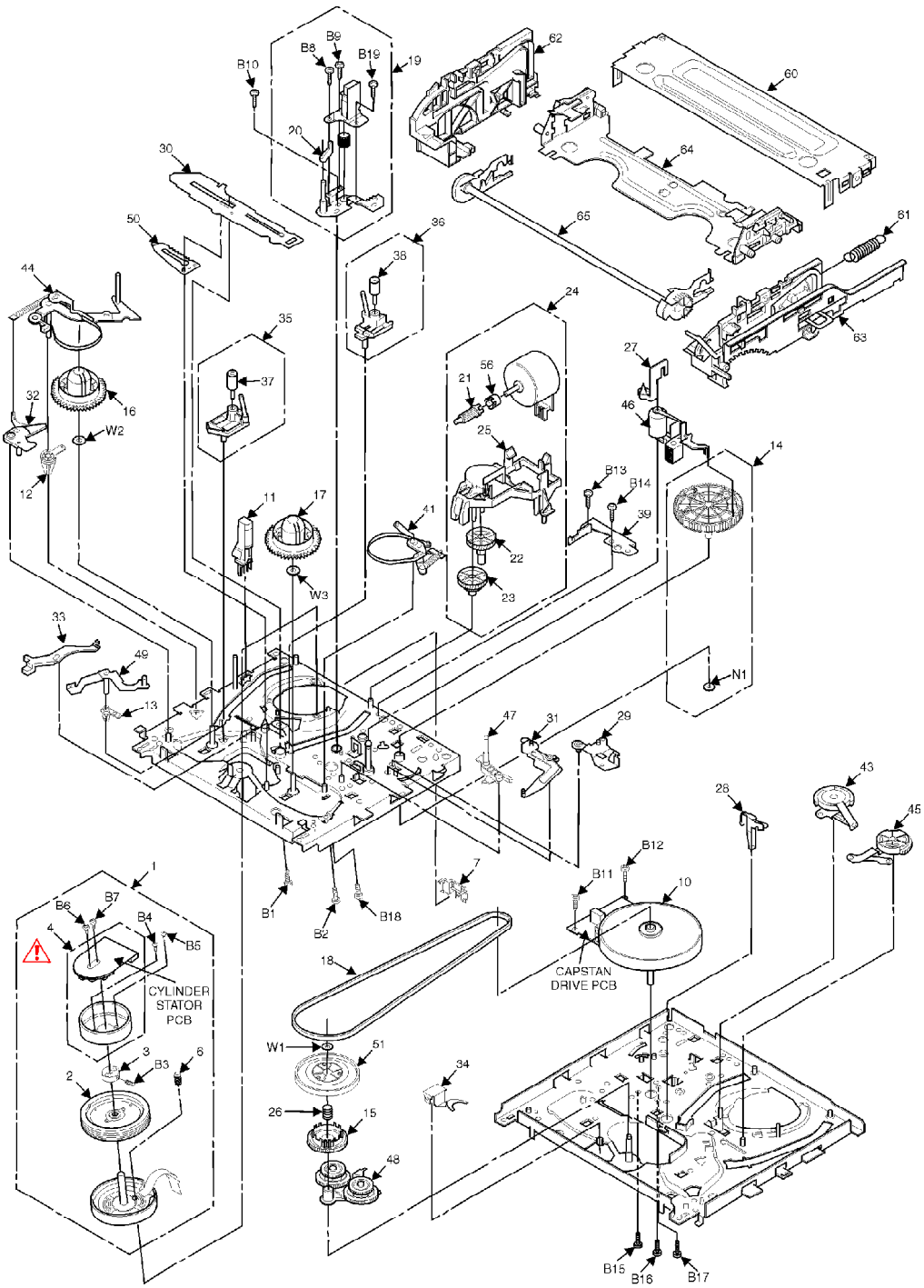
19.6. TV DEMODULATOR PACK PCB (NV-VP25EC/30EC/30EB/30EBL/30EP)

19.7. TV DEMODULATOR PACK PCB (NV-VP30EF)

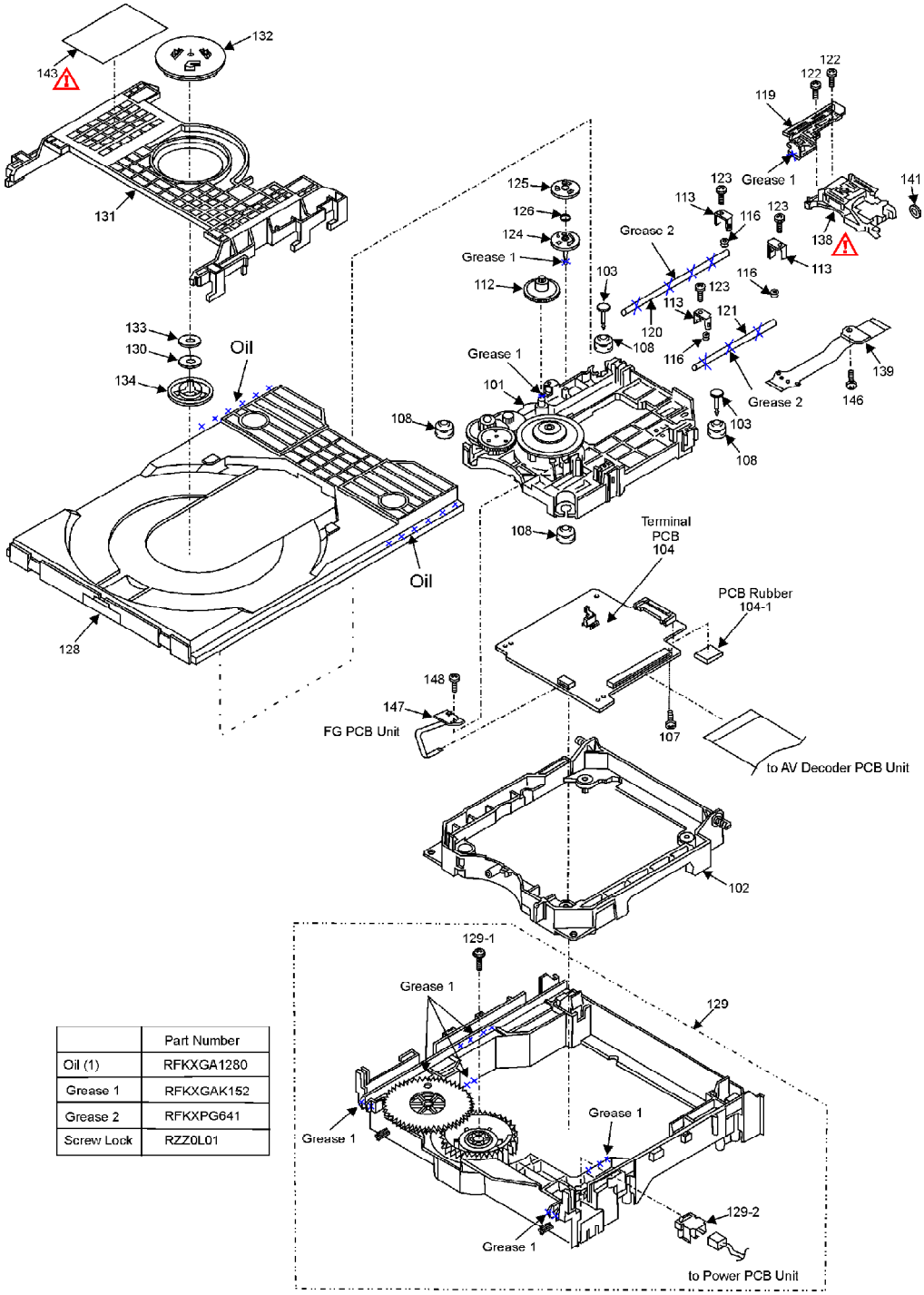
19.8. CYLINDER STATOR UNIT

20. EXPLODED VIEWS

20.1. VCR CHASSIS PARTS SECTION

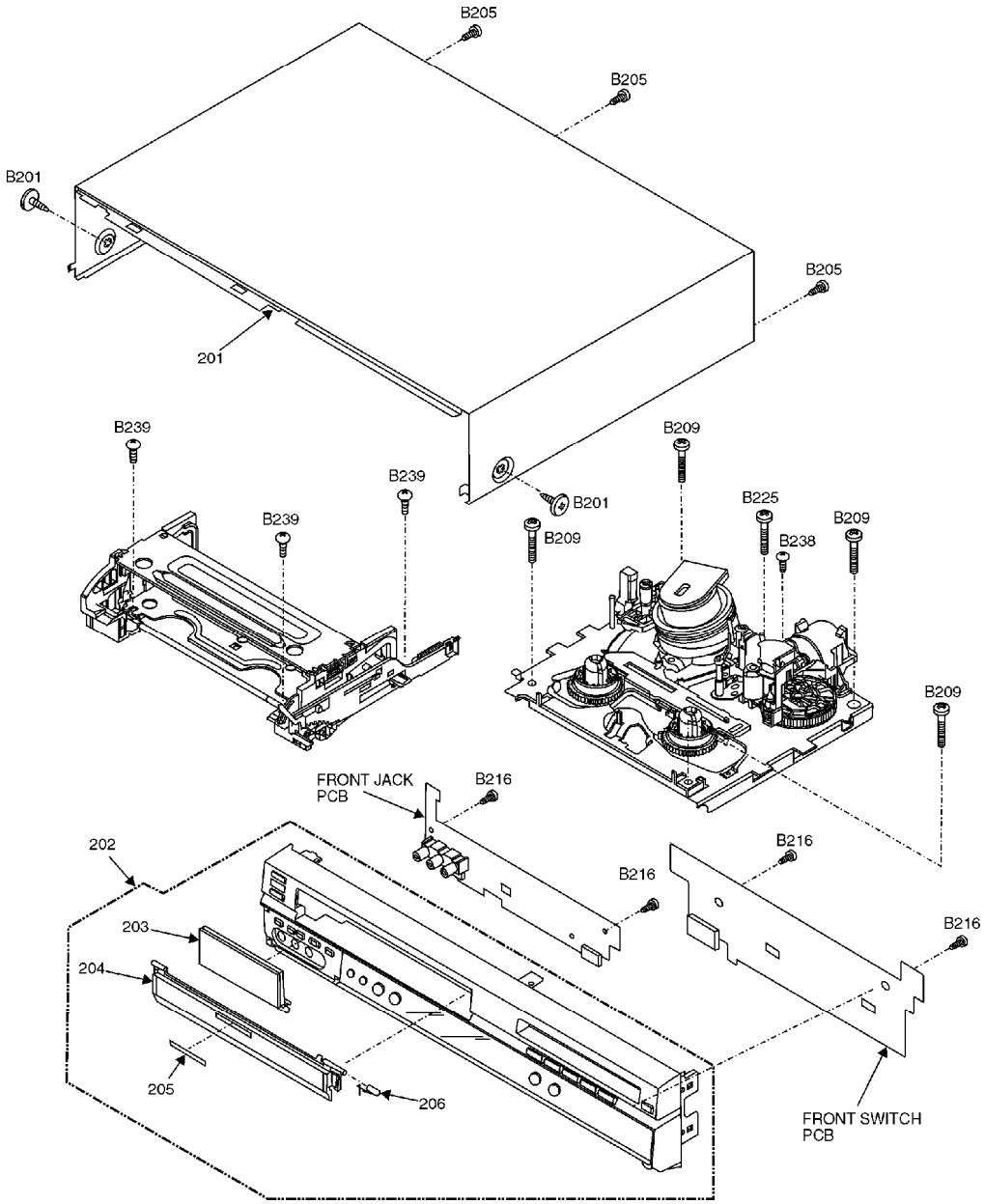


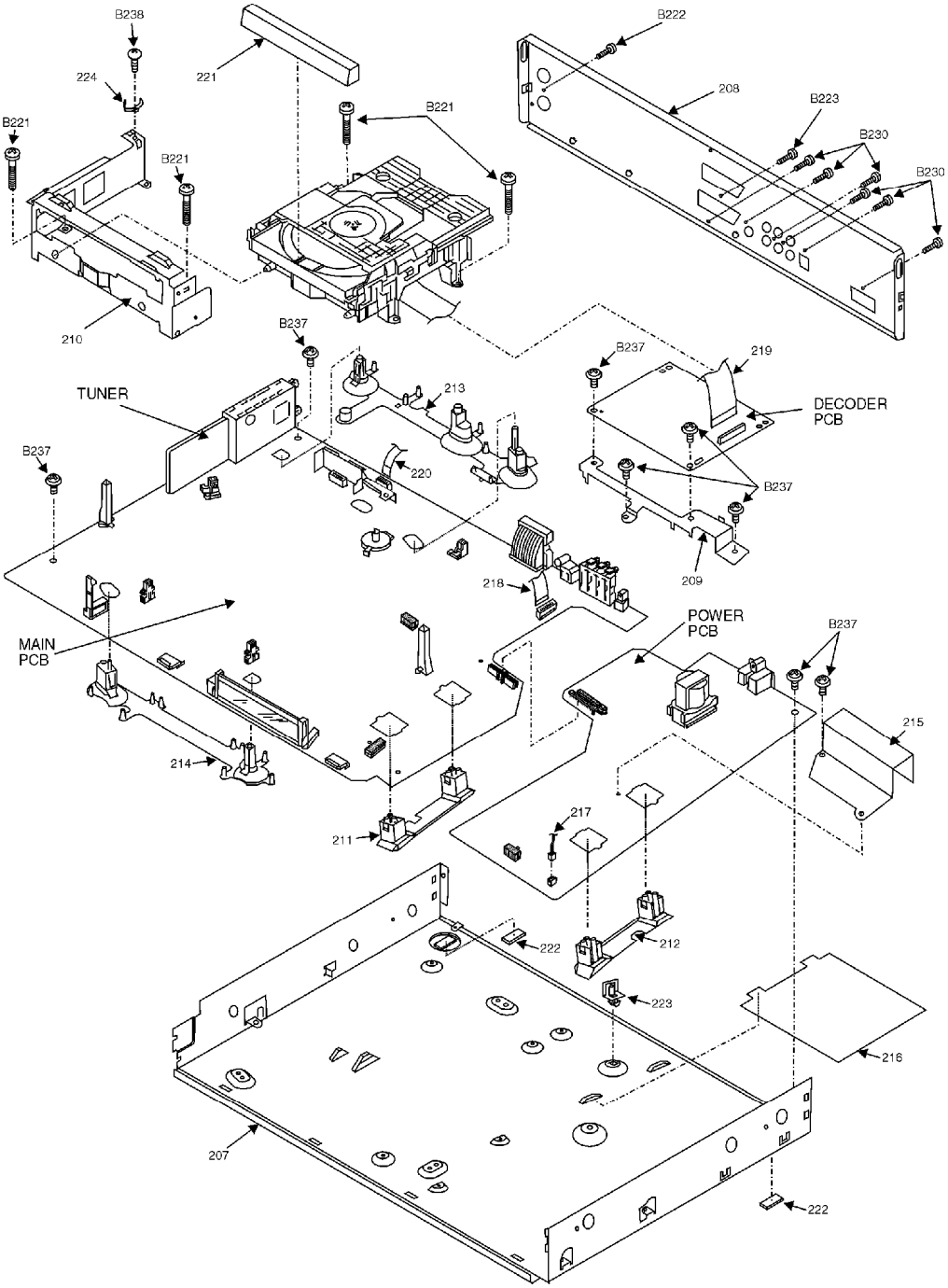
20.2. DVD CHASSIS PARTS SECTION



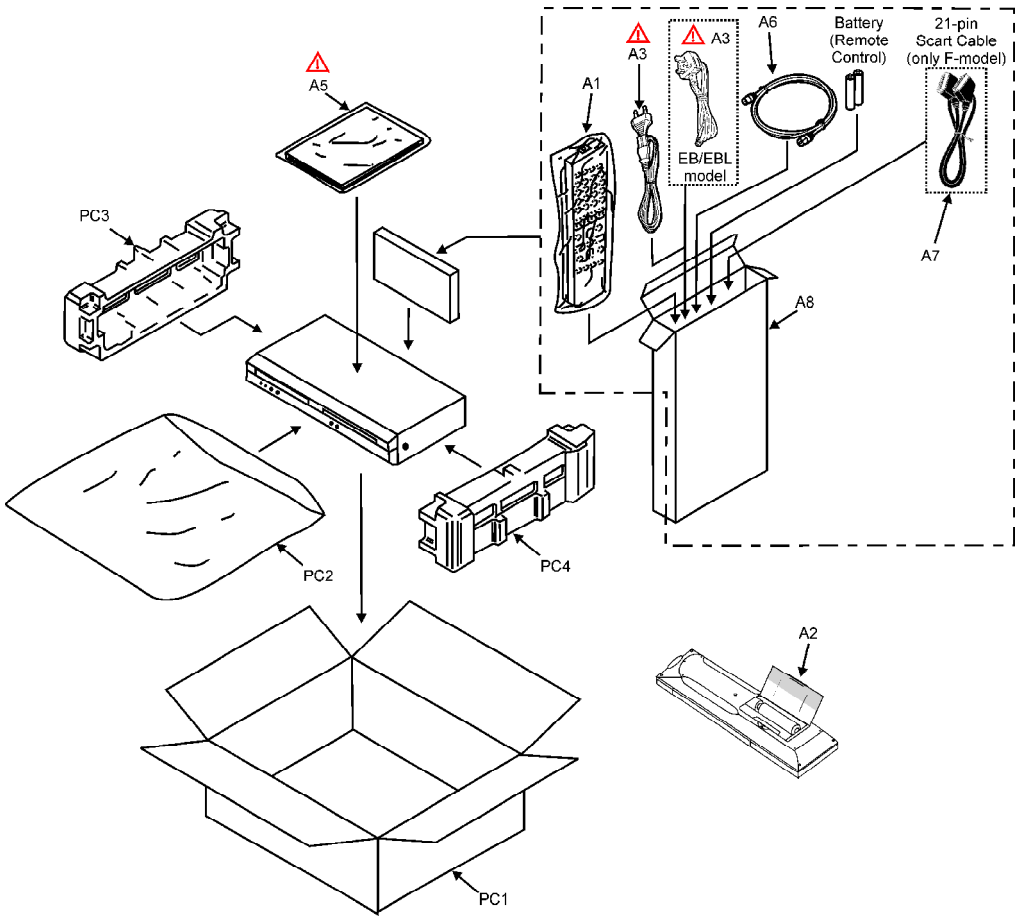
	Part Number
Oil (1)	RFKXGA1280
Grease 1	RFKXGAK152
Grease 2	RFKXPG641
Screw Lock	RZZ0L01

20.3. CASING PARTS SECTION


B205
B205
B201
B205
201
B239
B239
B239
B201
B209
B209
B225
B238
B209
B209
FRONT JACK
PCB
B216
B216
B216
B216
202
203
204
205
206
FRONT SWITCH
PCB



20.4. PACKING PARTS SECTION



21. REPLACEMENT PARTS LIST

Notes:

***Important safety notice:**

Components identified by ⚠ ; mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.

Do not use any part number shown on the Schematic Diagramm for ordering. When you order a part, please refer only to the PARTS LIST.

***Warning: This product uses a laser diode. Refer to caution statements.**

***ACHTUNG: Die Lasereinheit nicht zerlegen. Die Lasereinheit darf nur gegen eine vom Hersteller spezifizierte Einheit ausgetauscht werden.**

***Capacity values are in microfarads (μ F) unless specified otherwise, P=Pico-farads (pF), F= Farads (F).**

***Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM).**

***The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.**

***PCB's are identified by " ■ " character.**

Note: The "*1", "*2", "*3", "*4", "*5" in the Remarks column shows the models as follows:

***1 = NV-VP30EB**

***2 = NV-VP30EBL / NV-VP30EP**

***3 = NV-VP25EC / NV-VP30EC**
***4 = NV-VP30EF**
No indication = all models

21.1. VIDEO MECHA CHASSIS UNIT

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	VEG1598	CYLINDER UNIT	1	NV-VP30EB NV-VP30EBL NV-VP30EC NV-VP30EP NV-VP25EC
1	VEG1599	CYLINDER UNIT	1	NV-VP30EF
2	VXP2170	UPPER CYLINDER UNIT	1	NV-VP30EB NV-VP30EBL NV-VP30EC NV-VP30EP NV-VP25EC
2	VXP2172	UPPER CYLINDER UNIT	1	NV-VP30EF
3	VDB1256	CYLINDER RETAINER	1	
4	VEM0715	CYLINDER MOTOR UNIT	1	⚠
6	VXS0135	EARTH BRUSH UNIT	1	
7	VMD3795	FLAT CABLE HOLDER	1	
10	VEK9069	CAPSTAN UNIT	1	
11	L1AZ00000004	FE HEAD	1	
12	VDB1431	TENSION ARM BOSS	1	
13	VDB1460	SUPPLY BRAKE ARM BOSS	1	
14	VDG1220KIT	MAIN CAM GEAR KIT	1	
15	VDG1221	CONVERSION GEAR	1	
16	VDR0350	REEL TABLE	1	
17	VDR0350	REEL TABLE	1	
18	VDV0382	CAPSTAN BELT	1	
19	VED0412	A/C HEAD UNIT	1	
20	VMX2656	P4 CAP	1	
21	VDG1217	WORM GEAR	1	
22	VDG1218	WORM WHEEL GEAR	1	
23	VDG1219	CENTRE GEAR	1	
24	VEM0604	LOADING MOTOR UNIT	1	
25	VMD2619	MOTOR BRACKET	1	
26	VMB3045	CONVERSION GEAR SPRING	1	
27	VMD2620	OPENER PIECE	1	
28	VMD2738	LED PRISM	1	
29	VML3165	DRIVE RACK ARM	1	
30	VML3166	MAIN LEVER	1	
31	VML3167	DRIVE MAIN LEVER ARM	1	
32	VML3172	SUPPLY SPRING ARM	1	
33	VML3176	CONVERSION LEVER A	1	
34	VML3177	CONVERSION LEVER B	1	
35	VXA6040	INCLINED BASE (S) UNIT	1	
36	VXA5854	INCLINED BASE (T) UNIT	1	
37	VXP1891	ROLLER POST	1	
38	VXP1891	ROLLER POST	1	
39	VMA9672	SUPPORT ANGLE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
41	VXL2667	TAKE UP BRAKE ARM UNIT	1	
43	VXL2670	TAKE UP LOADING ARM UNIT	1	
44	VXL2798	TENSION ARM UNIT	1	
45	VXL2672	SUPPLY LOADING ARM UNIT	1	
46	VXL2785	PINCH ARM UNIT	1	
47	VXL2996	P5 ARM UNIT	1	
48	VXL2792	IDLER ARM UNIT	1	
49	VXL2733	SUPPLY BRAKE ARM UNIT	1	
50	VML3271	LOADING RACK B	1	
51	VXP2035	CENTRE CLUTCH UNIT	1	
56	VDP1660	MOTOR COUPLING	1	
60	VMA9516	TOP PLATE	1	
61	VMB3047	CONNECTION SPRING	1	
62	VMD3379	SIDE PLATE (L)	1	
63	VXA6540	SIDE PLATE (R) UNIT	1	
64	VXA5746	CASSETTE HOLDER UNIT	1	
65	VXP1730	MAIN SHAFT UNIT	1	
B1	VHD1117	SCREW	1	
B2	VHD1117	SCREW	1	
B3	VHD0842	SCREW	1	
B4	VHD0843	SCREW	1	
B5	VHD0843	SCREW	1	
B6	VHD0844	SCREW	1	
B7	VHD0844	SCREW	1	
B8	VHD1066	SCREW	1	
B9	VHD1066	SCREW	1	
B10	VHD1044	SCREW	1	
B11	VHD1060	SCREW	1	
B12	VHD1071	SCREW	1	
B13	XTS26+6F	SCREW	1	
B14	XTN26+6F	SCREW	1	
B15	XTN26+7J	SCREW	1	
B16	XTN26+7J	SCREW	1	
B17	XTN26+7J	SCREW	1	
B18	VHD1095	SCREW	1	
B19	VHD1185	SCREW	1	
N1	VHN0311	PUSH NUT	1	
W1	VMX2208	WASHER	1	
W2	VMX3022	WASHER	1	
W3	VMX3022	WASHER	1	

21.2. DVD MECHA CHASSIS UNIT

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
101	RXQ1016A	SPINDLE MOTOR ASS'Y	1	
102	RMR1323-K	MIDDLE CHASSIS	1	
103	RMS0712	FIXED PIN	2	
104	REP3406A-1N	TERMINAL PCB	1	(RTL)
104-1	RMG0558-K	PCB RUBBER	1	
107	XTN2+6G	SCREW	1	
108	RMG0545-A1	FLOATING RUBBER	4	
112	RDGC0499-J	TRAVERSE GEAR(A)	1	
113	RMC0415	ADJUST SPRING HOLDER 1	3	
116	RMEC0320	ADJUST SPRING	3	
119	RMM0251	TRAVERSE DRIVE RACK	1	
120	RMSC0710	GUIDE SHAFT(1)	1	
121	RMSC0711	GUIDE SHAFT(2)	1	
122	RHD17045	SCREW	2	
123	VHD1224-C	SCREW	3	
124	RDG0500	TRAVERSE GEAR(B)	1	
125	RDG0501	TRAVERSE GEAR(C)	1	
126	RMEC0319	TRAVERSE GEAR SPRING	1	
128	RGQ0280-K5	TRAY	1	
129	RXQ0727	MECHA CHASSIS ASS'Y	1	
129-1	XTW3+12S	SCREW	1	
129-2	RSH1A049-U	OPEN SWITCH	1	K0F111E00093
130	JSMC0048	MAGNET	1	
131	RMR1445-K	CLAMP PLATE	1	
132	RMR1447-X	MAGNET HOLDER	1	
133	XWG6FFY	WASHER	1	
134	RMR1446-X	CLAMPER	1	
138	RAF3023A	OPTICAL PICK-UP	1	⚠
139	RJB2309A	INTERFACE FPC	1	
141	RMG0561-T	CUSHION RUBBER	1	
143	RQLCA0141	LASER CAUTION LABEL	1	⚠
146	RHD14108	SCREW	1	
147	REP3081A	FG PCB	1	(RTL)
148	XTN2+6G	SCREW	1	

21.3. CASING PARTS

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
201	VGM2029	TOP PANEL	1	
202	VYP8788	FRONT PANEL UNIT	1	NV-VP30EC
202	VYP8798	FRONT PANEL UNIT	1	NV-VP30EB NV-VP30EBL
202	VYP8799	FRONT PANEL UNIT	1	NV-VP30EF
202	VYP8800	FRONT PANEL UNIT	1	NV-VP30EP
202	VYP8818	FRONT PANEL UNIT	1	NV-VP25EC
203	VYC0900	DOOR ORNAMENT UNIT	1	NV-VP30EB NV-VP30EBL NV-VP30EC NV-VP30EF NV-VP30EP
203	VYC0903	DOOR ORNAMENT UNIT	1	NV-VP25EC
204	VKF3750	BLINDER PANEL	1	
205	VGB0554	SUPER DRIVE BADGE	1	
206	VMB2521	BLINDER SPRING	1	
207	VMP7680	CHASSIS	1	
208	VMP7681	REAR PANEL	1	
209	VMP7682	DVD ANGLE	1	
210	VMP7683	FRONT ANGLE	1	
211	VMX3318	DVD SPACER(L)	1	
212	VMX3319	DVD SPACER(R)	1	
213	VMX3320	MECHA SPACER(R)	1	
214	VMX3346	MECHA SPACER(F)	1	
215	VMZ3366	BARRIER(U)	1	⚠
216	VMZ3367	BARRIER(D)	1	⚠
217	REXD0001	2P WIRE CABLE	1	
218	REZD0009	FFC (9P)	1	
219	REZD0010	FFC (50P)	1	
220	REZD0011	FFC (6P) (AC-HEAD)	1	
221	VGK2891	TRAY ORNAMENT	1	
222	VKA0364	FOOT	2	
223	VKC0583	PCB SPACER (POWER)	1	
224	VMC1534	EARTH SPRING	2	
B201	VHD1094	SCREW	2	
B205	VHD0690	SCREW	3	
B209	VHD1452-1	SCREW	4	
B216	XTBS26+10J	SCREW	4	
B221	VHD1494	SCREW	4	
B222	XSN3+4FZ	SCREW	1	
B223	XTB4+10GFZ	SCREW	1	
B225	VHD1495-1	SCREW	1	
B230	VHD0690	SCREW	6	
B237	XTN3+6F-C	SCREW	8	
B238	XTV26+6F	SCREW	2	
B239	XTV26+4F	SCREW	3	

21.4. PACKING PARTS

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
A5	RQTD0064-D	O/I BOOK/GERMAN	1	⚠ NV-VP30EC NV-VP25EC
A5	RQTD0065-H	O/I BOOK/DUTCH	1	⚠ NV-VP30EC NV-VP25EC
A5	RQTD0066-J	O/I BOOK/DANISH	1	⚠ NV-VP30EC NV-VP25EC
A5	RQTD0067-Z	O/I BOOK/SWEDISH	1	⚠ NV-VP30EC NV-VP25EC
A5	RQTD0068-F	O/I BOOK/FRENCH	1	⚠ NV-VP30EF
A5	RQTD0069-V	O/I BOOK/ITALIAN	1	⚠ NV-VP30EC NV-VP25EC
A5	RQTD0070-A	O/I BOOK/ENGLISH	1	⚠ NV-VP30EC NV-VP25EC
A5	RQTD0071-M	O/I BOOK/SPANISH	1	⚠ NV-VP30EC NV-VP25EC
A5	RQTD0072-Q	O/I BOOK/POLISH	1	⚠ NV-VP30EP
A5	RQTD0073-B	O/I BOOK/ENGLISH(UK)	1	⚠ NV-VP30EB NV-VP30EBL
A5	RQTD0074-K	O/I BOOK/FINNISH	1	⚠ NV-VP30EC NV-VP25EC
A5	RQTD0075-U	O/I BOOK/PORTUGUESE	1	⚠ NV-VP30EC NV-VP25EC
A5	RQTD0076-S	O/I BOOK/CZECH	1	⚠ NV-VP30EP
A5	RQTD0077-T	O/I BOOK/HUNGARIAN	1	⚠ NV-VP30EP
A5	RQTD0081-C	O/I BOOK/FRENCH	1	⚠ NV-VP30EC NV-VP25EC
A1	EUR7615KS0	REMOTE CONTROLLER	1	NV-VP30EC NV-VP30EF NV-VP30EP NV-VP25EC
A1	EUR7615KT0	REMOTE CONTROLLER	1	NV-VP30EB NV-VP30EBL
A2	UR76EC1503A	BATTERY COVER	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
A3	RJA0043-1C	POWER CORD	1	⚠ NV-VP30EC NV-VP30EF NV-VP30EP NV-VP25EC
A3	RJA0044-3C	POWER CORD	1	⚠ NV-VP30EB NV-VP30EBL
A6	VJA0728-A	RF CABLE	1	NV-VP30EB NV-VP30EBL NV-VP30EC NV-VP30EP NV-VP25EC
A6	K1TWACB00005	RF CABLE	1	NV-VP30EF
A7	VJA1057	21 PIN CABLE	1	NV-VP30EF
A8	VPK2246	ACCESSORY BOX	1	
PC1	VPG0T96	PACKING CASE	1	
PC2	VZZ0025-A	PE-PROTECTION BAG	1	
PC3	VPN6043	CUSHION L	1	
PC4	VPN6044	CUSHION R	1	

21.5. PRINTED CIRCUIT BOARD

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP06F30B	MAIN PCB	1	(RTL) *1 THE FOLLOWING PCB IS INCLUDED IN MAIN PCB VEP07A23T-SK
■	VEP06F30E	MAIN PCB	1	(RTL) *2 THE FOLLOWING PCB IS INCLUDED IN MAIN PCB VEP07A23T-SK
■	VEP06F30C	MAIN PCB	1	(RTL) *3 THE FOLLOWING PCB IS INCLUDED IN MAIN PCB VEP07A23T-SK
■	VEP06F30D	MAIN PCB	1	(RTL) *4 THE FOLLOWING PCB IS INCLUDED IN MAIN PCB VEP07A47A-SK

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP07A23T-SK	TV DEMODULATOR PCB / (TUNER)	1	(RTL) *1 INCLUDED IN MAIN PCB VEP06F30B
■	VEP07A23U-SK	TV DEMODULATOR PCB / (TUNER)	1	(RTL) *2 INCLUDED IN MAIN PCB VEP06F30E
■	VEP07A23S-SK	TV DEMODULATOR PCB / (TUNER)	1	(RTL) *3 INCLUDED IN MAIN PCB VEP06F30C
■	VEP07A47A-SK	TV DEMODULATOR PCB / (TUNER)	1	(RTL) *4 INCLUDED IN MAIN PCB VEP06F30D
■	VEP01932A	POWER PCB	1	(RTL)
■	VEP03G40A	AV DECODER PCB	1	(RTL)
■	VEP04839A	FRONT JACK PCB	1	(RTL)
■	VEP06F31A	FRONT SWITCH PCB	1	(RTL)
■	REP3406A-1N	TERMINAL PCB	1	(RTL)
■		CYLINDER STATOR PCB	1	INCLUDED IN CYLINDER STATOR UNIT VEM0715
■		CAPSTAN DRIVE PCB	1	INCLUDED IN CAPSTAN UNIT VEK9069

21.6. ELECTRICAL PARTS

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP06F30B	MAIN PCB	1	(RTL) *1
■	VEP06F30E	MAIN PCB	1	(RTL) *2
■	VEP06F30C	MAIN PCB	1	(RTL) *3
■	VEP06F30D	MAIN PCB	1	(RTL) *4
C0701	ECJ2VF1C105Z	CHIP CAPACITOR	1	*1, *2, *3
C0701	F1H1H103A220	CHIP CAPACITOR	1	*4
C0702	F1H1H102A009	CHIP CAPACITOR	1	*1, *2, *3
C0702	ECJ2VC1H151J	CHIP CAPACITOR	1	*4
C0703	F1J1A1050024	CHIP CAPACITOR	1	*1, *2, *3
C0703	F1H1H103A220	CHIP CAPACITOR	1	*4
C0704	ECJ2VB1H333K	CHIP CAPACITOR	1	*1, *2, *3
C0704	ECJ2VC1H270J	CHIP CAPACITOR	1	*4
C0705	F1H1H103A220	CHIP CAPACITOR	1	*4
C0706	ECJ2VF1H103Z	CHIP CAPACITOR	1	*4
C0707	ECEA1HKA2R2B	ALU ELEC CAPACITOR	1	*1, *2, *3
C0707	F1H1H103A220	CHIP CAPACITOR	1	*4
C0708	ECEA1HKAR47B	ALU ELEC CAPACITOR	1	*1, *2, *3
C0708	F1H1H103A220	CHIP CAPACITOR	1	*4
C0709	F1H1H103A220	CHIP CAPACITOR	1	*4
C0710	F1H1H103A220	CHIP CAPACITOR	1	
C0711	ECEA1CKA220B	ALU ELEC CAPACITOR	1	*1, *2, *3
C0712	F1H1C104A008	CHIP CAPACITOR	1	*1, *2, *3
C0712	F1J1C4740012	CHIP CAPACITOR	1	*4
C0713	ECEA0JKA331Q	ALU ELEC CAPACITOR	1	*1, *2, *3
C0714	ECJ2VF1C105Z	CHIP CAPACITOR	1	*1, *2, *3
C0714	F1H1H103A220	CHIP CAPACITOR	1	*4
C0715	F1H1H120A230	CHIP CAPACITOR	1	*1
C0715	ECJ1VC1H030C	CHIP CAPACITOR	1	*2, *3
C0715	F1H1H103A220	CHIP CAPACITOR	1	*4
C0716	ECJ1VC1H391J	CHIP CAPACITOR	1	*4
C0717	ECUV1H330GUV	CHIP CAPACITOR	1	*1, *2, *3
C0717	F1H1H103A220	CHIP CAPACITOR	1	*4
C0719	F1H1E104A030	CHIP CAPACITOR	1	*1, *2, *3
C0719	F1J1C4740012	CHIP CAPACITOR	1	*4
C0720	F1H1H103A220	CHIP CAPACITOR	1	*4
C0721	ECJ1VC1H121J	CHIP CAPACITOR	1	*3
C0721	ECJ1VC1H560J	CHIP CAPACITOR	1	*2
C0721	F1H1H820A230	CHIP CAPACITOR	1	*1
C0721	F1H1H103A220	CHIP CAPACITOR	1	*4
C0722	ECJ2VF1H104Z	CHIP CAPACITOR	1	*4
C0723	ECEA1CKA101B	ALU ELEC CAPACITOR	1	*4
C0724	ECJ1VB1H331K	CHIP CAPACITOR	1	*1
C0724	ECJ1VB1H221K	CHIP CAPACITOR	1	*2, *3
C0725	ECEA1HKA2R2B	ALU ELEC CAPACITOR	1	*4
C0726	F1H1H152A219	CHIP CAPACITOR	1	*4
C0728	ECEA1HKA0R1B	ALU ELEC CAPACITOR	1	*4
C0729	F1H1H103A220	CHIP CAPACITOR	1	*4
C0730	ECEA1CKA220B	ALU ELEC CAPACITOR	1	*4
C0733	ECEA1HKAR22B	ALU ELEC CAPACITOR	1	*4
C0734	F1H1H152A219	CHIP CAPACITOR	1	*4
C0735	F1H1H103A220	CHIP CAPACITOR	1	*4
C0738	ECJ1VC1H390J	CHIP CAPACITOR	1	*4

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C0739	F1H1H470A230	CHIP CAPACITOR	1	*4
C0740	ERJ3GEY0R00V	CHIP RESISTOR	1	*4
C0741	F1H1H103A220	CHIP CAPACITOR	1	*4
C0742	F1H1H330A230	CHIP CAPACITOR	1	*4
C0743	F1H1H180A230	CHIP CAPACITOR	1	*4
C1001	F1H1H103A220	CHIP CAPACITOR	1	
C1002	ECA1EHJ470B	ALU ELEC CAPACITOR	1	
C1003	F1H1H103A220	CHIP CAPACITOR	1	
C1004	ECA1EHJ470B	ALU ELEC CAPACITOR	1	
C1007	ECJ2YB0J225K	CHIP CAPACITOR	1	
C1009	F1H1H103A220	CHIP CAPACITOR	1	
C1010	F1H1H103A220	CHIP CAPACITOR	1	
C1202	ECEA0JKA101B	ALU ELEC CAPACITOR	1	
C1204	ECEA1AKA220B	ALU ELEC CAPACITOR	1	
C1206	F1H1H103A220	CHIP CAPACITOR	1	
C1207	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C1208	F1H1E104A030	CHIP CAPACITOR	1	
C1502	F1H1E104A030	CHIP CAPACITOR	1	
C2501	ECJ1VB1C563K	CHIP CAPACITOR	1	
C2502	F1H1C104A071	CHIP CAPACITOR	1	
C2506	ECJ1VB1C563K	CHIP CAPACITOR	1	
C2507	ECJ1VB1C563K	CHIP CAPACITOR	1	
C2508	F1H1C104A071	CHIP CAPACITOR	1	
C2509	ECJ1VF1C474Z	CHIP CAPACITOR	1	
C2510	F1H1H330A230	CHIP CAPACITOR	1	
C2511	ECEA0JKN220B	ALU ELEC CAPACITOR	1	
C2512	ECEA1EKA4R7B	ALU ELEC CAPACITOR	1	
C2513	ECJ1VB1H392K	CHIP CAPACITOR	1	
C2514	F1H1E104A030	CHIP CAPACITOR	1	
C2515	ECEA1VKN4R7B	ALU ELEC CAPACITOR	1	
C2516	ECEA1VKN4R7B	ALU ELEC CAPACITOR	1	
C2517	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C2518	ECUV1H473ZFV	CHIP CAPACITOR	1	
C2519	ECA1EHJ470B	ALU ELEC CAPACITOR	1	
C2520	ECJ2VB1E683K	CHIP CAPACITOR	1	
C2521	ECJ2VB1C154K	CHIP CAPACITOR	1	
C2522	ECJ2VB1C154K	CHIP CAPACITOR	1	
C2523	ECJ2VB1C154K	CHIP CAPACITOR	1	
C2524	ECEA1VKN4R7B	ALU ELEC CAPACITOR	1	
C3001	ECJ1VC1H151J	CHIP CAPACITOR	1	
C3002	F1H0J105A002	CHIP CAPACITOR	1	
C3003	F1H1C104A071	CHIP CAPACITOR	1	
C3004	F1H1H103A748	CHIP CAPACITOR	1	
C3005	F1H1H270A230	CHIP CAPACITOR	1	
C3006	F1H1C104A071	CHIP CAPACITOR	1	
C3007	F1J1C105A091	CHIP CAPACITOR	1	
C3008	ECEA1EKS4R7B	ALU ELEC CAPACITOR	1	
C3009	F1H1H103A220	CHIP CAPACITOR	1	
C3010	F1J1C105A091	CHIP CAPACITOR	1	
C3011	F1H1H103A220	CHIP CAPACITOR	1	
C3012	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C3014	ECJ1VF1A105Z	CHIP CAPACITOR	1	
C3015	F1H0J105A002	CHIP CAPACITOR	1	
C3017	F1H1C104A071	CHIP CAPACITOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3018	F1H1C104A071	CHIP CAPACITOR	1	
C3019	F1H1C104A071	CHIP CAPACITOR	1	
C3020	ECEA1HKA3R3B	ALU ELEC CAPACITOR	1	
C3021	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C3022	F1H1C104A071	CHIP CAPACITOR	1	*4
C3024	ECJ1VC1H331J	CHIP CAPACITOR	1	
C3025	F1H1H103A220	CHIP CAPACITOR	1	
C3026	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C3027	ECEA1HKA010B	ALU ELEC CAPACITOR	1	
C3028	ECEA1HKA4R7B	ALU ELEC CAPACITOR	1	
C3029	ECEA1HKAR47B	ALU ELEC CAPACITOR	1	
C3030	F1H1E223A029	CHIP CAPACITOR	1	
C3031	F1H1C333A059	CHIP CAPACITOR	1	
C3032	ECEA1HKA3R3B	ALU ELEC CAPACITOR	1	
C3033	F1H1C104A071	CHIP CAPACITOR	1	
C3034	ECEA1HKA2R2B	ALU ELEC CAPACITOR	1	
C3035	F1H1E223A029	CHIP CAPACITOR	1	
C3036	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C3037	F1H1H103A220	CHIP CAPACITOR	1	
C3038	ECJ1VC1H030C	CHIP CAPACITOR	1	
C3039	ECEA1HKA010B	ALU ELEC CAPACITOR	1	
C3040	F1H1H103A220	CHIP CAPACITOR	1	
C3041	F1H1H103A220	CHIP CAPACITOR	1	
C3042	F1H1E104A030	CHIP CAPACITOR	1	
C3053	F1H1H103A220	CHIP CAPACITOR	1	
C3054	F1H1H470A230	CHIP CAPACITOR	1	
C3058	F1H1C104A071	CHIP CAPACITOR	1	
C3062	ERJ3GEY0R00V	CHIP RESISTOR	1	*4
C3064	F1H1C104A071	CHIP CAPACITOR	1	*4
C4001	ECEA0JKA101B	ALU ELEC CAPACITOR	1	
C4003	F1H1H472A219	CHIP CAPACITOR	1	
C4004	ECJ1VB1H122K	CHIP CAPACITOR	1	
C4005	ECEA0JKA220B	ALU ELEC CAPACITOR	1	
C4006	ECEA1EKA4R7B	ALU ELEC CAPACITOR	1	
C4008	ECEA1HKA3R3B	ALU ELEC CAPACITOR	1	
C4009	ECEA0JKA220B	ALU ELEC CAPACITOR	1	
C4011	ECJ1VB1H822K	CHIP CAPACITOR	1	
C4012	ECEA1HKA4R7B	ALU ELEC CAPACITOR	1	
C4013	F1H1H103A220	CHIP CAPACITOR	1	
C4014	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C4016	F1H1C104A071	CHIP CAPACITOR	1	
C4017	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C4018	F1J1C105A091	CHIP CAPACITOR	1	
C4019	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C4020	F1H1H221A736	CHIP CAPACITOR	1	
C4021	ECQB1H223JF3	PLAST FILM CAPACITOR	1	
C4022	F1H1H152A219	CHIP CAPACITOR	1	
C4023	ECEA0JKA221B	ALU ELEC CAPACITOR	1	
C4024	F1H1E223A029	CHIP CAPACITOR	1	
C4025	ECEA1AKA220B	ALU ELEC CAPACITOR	1	
C4026	ECEA0JKA221B	ALU ELEC CAPACITOR	1	
C4302	ECA1CAK470XB	ALU ELEC CAPACITOR	1	
C4303	ECA1CAK470XB	ALU ELEC CAPACITOR	1	
C4501	ECEA1CKA100B	ALU ELEC CAPACITOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4502	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C4503	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C4504	ECQB1H473JF3	PLAST FILM CAPACITOR	1	
C4505	ECEA1AKA330B	ALU ELEC CAPACITOR	1	
C4506	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C4507	ECEA1CKA220B	ALU ELEC CAPACITOR	1	
C4508	ECQB1H153JF3	PLAST FILM CAPACITOR	1	
C4509	F1H1C333A059	CHIP CAPACITOR	1	
C4510	F1H1H103A220	CHIP CAPACITOR	1	
C4511	ECJ1VC1H151J	CHIP CAPACITOR	1	
C4512	ECJ1VC1H151J	CHIP CAPACITOR	1	
C4513	F1H1H103A220	CHIP CAPACITOR	1	
C4514	F1H1H103A220	CHIP CAPACITOR	1	
C4515	ECEA0JKA101B	ALU ELEC CAPACITOR	1	
C4516	F1H1E104A030	CHIP CAPACITOR	1	
C4517	F1H1H101A736	CHIP CAPACITOR	1	
C4518	F1H1A224A028	CHIP CAPACITOR	1	
C4519	ECQB1H153JF3	PLAST FILM CAPACITOR	1	
C4520	ECEA1CKA220B	ALU ELEC CAPACITOR	1	
C4521	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C4522	ECQB1H473JF3	PLAST FILM CAPACITOR	1	
C4523	ECEA1AKA330B	ALU ELEC CAPACITOR	1	
C4525	F1H1C104A071	CHIP CAPACITOR	1	
C4526	F1H1C104A071	CHIP CAPACITOR	1	
C4527	F1H1C104A071	CHIP CAPACITOR	1	
C4528	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C4529	ECJ2YB0J225K	CHIP CAPACITOR	1	
C4530	ECJ2YB0J225K	CHIP CAPACITOR	1	
C4531	F1H1E104A030	CHIP CAPACITOR	1	
C4533	F1J1C105A091	CHIP CAPACITOR	1	*1, *2, *3
C4534	ECEA1AKA220B	ALU ELEC CAPACITOR	1	*1, *2, *3
C4536	ECEA1CKA470B	ALU ELEC CAPACITOR	1	
C4537	F1H1H103A748	CHIP CAPACITOR	1	
C4539	F1H1H180A230	CHIP CAPACITOR	1	
C4552	F1H1C104A071	CHIP CAPACITOR	1	
C4553	F1H1C104A071	CHIP CAPACITOR	1	
C4555	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C4556	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C4901	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4902	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4903	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4904	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4905	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4906	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4907	F1H1H470A230	CHIP CAPACITOR	1	
C4908	F1H1H470A230	CHIP CAPACITOR	1	
C4909	F1H1H470A230	CHIP CAPACITOR	1	
C4910	F1H1H470A230	CHIP CAPACITOR	1	
C4912	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4913	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4914	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4915	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4917	ECJ1VF1A105Z	CHIP CAPACITOR	1	
C4918	F1H1E104A030	CHIP CAPACITOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4922	ECJ1VF1A105Z	CHIP CAPACITOR	1	
C4923	F1H1E104A030	CHIP CAPACITOR	1	
C4924	ECJ1VF1A105Z	CHIP CAPACITOR	1	
C4927	ECEA0JKA221B	ALU ELEC CAPACITOR	1	
C4930	F1H1E104A030	CHIP CAPACITOR	1	
C4931	ECJ1VF1A105Z	CHIP CAPACITOR	1	
C4932	ECJ1VF1A105Z	CHIP CAPACITOR	1	
C4933	ECJ1VF1A105Z	CHIP CAPACITOR	1	
C4941	F1H1E104A030	CHIP CAPACITOR	1	
C4943	F1H1C104A071	CHIP CAPACITOR	1	
C4946	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4947	ECJ1VB1H471K	CHIP CAPACITOR	1	
C4948	F2A1A331A211	ALU ELEC CAPACITOR	1	
C4949	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C4950	F1H1H103A220	CHIP CAPACITOR	1	
C4951	F1H1C104A071	CHIP CAPACITOR	1	
C4952	F1H1C104A071	CHIP CAPACITOR	1	
C4953	F1H1C104A071	CHIP CAPACITOR	1	
C4954	F1H1C104A071	CHIP CAPACITOR	1	
C4955	ECEA0GKA471Q	ALU ELEC CAPACITOR	1	
C4956	F1H0J105A002	CHIP CAPACITOR	1	
C4957	F1H1C104A071	CHIP CAPACITOR	1	
C4958	F1H1C104A071	CHIP CAPACITOR	1	
C4959	ECJ1VC1H151J	CHIP CAPACITOR	1	
C4960	F1H1C104A071	CHIP CAPACITOR	1	
C4961	F1H1C104A071	CHIP CAPACITOR	1	
C4962	F1H1C104A071	CHIP CAPACITOR	1	
C4964	F1H1C104A071	CHIP CAPACITOR	1	
C4965	F1H1C104A071	CHIP CAPACITOR	1	
C4966	F1H1E104A030	CHIP CAPACITOR	1	
C5001	F1H1H103A748	CHIP CAPACITOR	1	
C5002	F1H1H103A748	CHIP CAPACITOR	1	
C5003	F1H1H103A748	CHIP CAPACITOR	1	
C5004	F1H1H103A748	CHIP CAPACITOR	1	
C5005	F1H1C104A071	CHIP CAPACITOR	1	
C5006	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C5007	F1H1E104A030	CHIP CAPACITOR	1	
C6001	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C6003	ECJ1VC1H471J	CHIP CAPACITOR	1	
C6004	F1H1H103A220	CHIP CAPACITOR	1	
C6005	F1H1H103A220	CHIP CAPACITOR	1	
C6006	F1H1H330A230	CHIP CAPACITOR	1	*2, *4
C6009	F1H1H180A230	CHIP CAPACITOR	1	
C6010	F1H1H180A230	CHIP CAPACITOR	1	
C6011	F1H1H180A230	CHIP CAPACITOR	1	
C6012	F1H1H150A230	CHIP CAPACITOR	1	
C6015	ECEA1CKA100B	ALU ELEC CAPACITOR	1	
C6016	F1H1H103A220	CHIP CAPACITOR	1	
C6017	ECJ1VC1H681J	CHIP CAPACITOR	1	
C6022	ECJ1VB1H221K	CHIP CAPACITOR	1	
C6023	ECJ1VF1A105Z	CHIP CAPACITOR	1	
C6024	ECEA0JKA221B	ALU ELEC CAPACITOR	1	
C6025	F1H1E104A030	CHIP CAPACITOR	1	
C6027	F1H1C333A059	CHIP CAPACITOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C6028	F1H1H222A219	CHIP CAPACITOR	1	
C6032	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C6035	F1H0J105A002	CHIP CAPACITOR	1	
C6036	ECJ1VC1H561J	CHIP CAPACITOR	1	
C6101	F1H1E104A030	CHIP CAPACITOR	1	
C6102	F1H1E104A030	CHIP CAPACITOR	1	
C6103	F1H1E104A030	CHIP CAPACITOR	1	
C6104	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C6105	F1H1E104A030	CHIP CAPACITOR	1	
C6106	F1H1H103A220	CHIP CAPACITOR	1	
C6107	F1H1H103A220	CHIP CAPACITOR	1	
C6108	F1H1H103A220	CHIP CAPACITOR	1	
C6109	F1H1H103A220	CHIP CAPACITOR	1	
C6110	F1H1H103A220	CHIP CAPACITOR	1	
C7301	F1H1H103A220	CHIP CAPACITOR	1	
C7302	ECEA0JKA101B	ALU ELEC CAPACITOR	1	
C7303	F1H1H103A220	CHIP CAPACITOR	1	
C7304	ECEA0JKA101B	ALU ELEC CAPACITOR	1	
C7305	F1H1H330A230	CHIP CAPACITOR	1	
C7306	F1H1H330A230	CHIP CAPACITOR	1	
C7311	F1H1H103A220	CHIP CAPACITOR	1	
C7312	F1H1E104A030	CHIP CAPACITOR	1	
C7314	F1H1C104A071	CHIP CAPACITOR	1	
C7316	F1H1E104A030	CHIP CAPACITOR	1	
C7318	ECEA0JKA470B	ALU ELEC CAPACITOR	1	
C7319	F1J1C105A091	CHIP CAPACITOR	1	
C7320	F1J1C105A091	CHIP CAPACITOR	1	
C7323	F1H1E104A030	CHIP CAPACITOR	1	
C7324	F1H1H152A219	CHIP CAPACITOR	1	*1, *2, *3
C7325	F1H1C104A071	CHIP CAPACITOR	1	
C7326	F1J1C105A091	CHIP CAPACITOR	1	
C7328	F1H1E104A030	CHIP CAPACITOR	1	
C7331	F1J1C105A091	CHIP CAPACITOR	1	
C7341	F1H1H472A219	CHIP CAPACITOR	1	
C7342	F1H1H472A219	CHIP CAPACITOR	1	
C7343	ECEA0JKA221B	ALU ELEC CAPACITOR	1	
C7507	F4D55473A005	ALU ELEC CAPACITOR	1	
C7508	ECEA0JKA221B	ALU ELEC CAPACITOR	1	
C7509	ECJ1VF1C683Z	CHIP CAPACITOR	1	
C7510	F1H1H103A220	CHIP CAPACITOR	1	
C7511	F1H1E104A030	CHIP CAPACITOR	1	
C7603	ECEA0JKA101B	ALU ELEC CAPACITOR	1	
C7604	ECEA0JKA101B	ALU ELEC CAPACITOR	1	*1, *2, *3
C7606	F1H1H103A220	CHIP CAPACITOR	1	*1, *2, *3
C7607	ECJ1VB1H221K	CHIP CAPACITOR	1	
C7608	F1H1H221A736	CHIP CAPACITOR	1	
C7610	ECEA1HKA010B	ALU ELEC CAPACITOR	1	
C7611	ECJ2VF1H104Z	CHIP CAPACITOR	1	
C7612	F1H1E104A030	CHIP CAPACITOR	1	
C7613	F1H1H103A748	CHIP CAPACITOR	1	
C7614	F1H1H330A230	CHIP CAPACITOR	1	
C7615	F1H1H330A230	CHIP CAPACITOR	1	
C7616	ECEA0JKA101B	ALU ELEC CAPACITOR	1	
C7617	F1H1H103A220	CHIP CAPACITOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7620	F1H1E104A030	CHIP CAPACITOR	1	
C7623	F1H1H103A220	CHIP CAPACITOR	1	
C7624	F1H1H103A220	CHIP CAPACITOR	1	
C7627	ECJ1VB1H471K	CHIP CAPACITOR	1	*1, *2, *3
C7628	F1H1H102A009	CHIP CAPACITOR	1	*1, *2, *3
C7701	ECJ1VC1H151J	CHIP CAPACITOR	1	
C7702	ECJ1VF1C474Z	CHIP CAPACITOR	1	
C7703	F1H1E104A030	CHIP CAPACITOR	1	
C8801	F1H1H103A220	CHIP CAPACITOR	1	*4
C8802	ECEA1HKA010B	ALU ELEC CAPACITOR	1	*4
C8803	F1H1H103A748	CHIP CAPACITOR	1	*4
C8804	ECJ2YB0J225K	CHIP CAPACITOR	1	*4
C8805	F1H1H222A219	CHIP CAPACITOR	1	*4
C8806	F1H1H222A219	CHIP CAPACITOR	1	*4
C8807	ECEA1HKA010B	ALU ELEC CAPACITOR	1	*4
C8808	ECEA1HKAR47B	ALU ELEC CAPACITOR	1	*4
C8809	F1H1H103A220	CHIP CAPACITOR	1	*4
C8810	F1H1C104A071	CHIP CAPACITOR	1	*4
C8811	ECEA0JKA101B	ALU ELEC CAPACITOR	1	*4
C8812	F1H1C104A071	CHIP CAPACITOR	1	*4
C8813	ECJ1VC1H121J	CHIP CAPACITOR	1	*4
C8815	ECEA1HKAR47B	ALU ELEC CAPACITOR	1	*4
C8816	F1H1E104A030	CHIP CAPACITOR	1	*4
C8817	F1H1C104A071	CHIP CAPACITOR	1	*4
D0701	MA3Z080D0L	DIODE	1	*4
D0702	ERJ6GEY0R00Z	CHIP RESISTOR	1	*1, *2, *3
D0703	MA3Z080E0L	DIODE	1	*4
D1002	MAZ4130NLF	DIODE	1	
D1003	MAZ4051NMF	DIODE	1	
D1004	B0EADD000002	DIODE	1	
D1005	MAZ40390HF	ZENER DIODE	1	
D1201	MAZ4051NMF	DIODE	1	
D1202	B0EADD000002	DIODE	1	
D1501	B3EA00000040	DIODE	1	
D2501	B0EADD000002	DIODE	1	
D2502	B0EADD000002	DIODE	1	
D4501	B0EADD000002	DIODE	1	
D4502	B0EADD000002	DIODE	1	
D4503	MAZ409100F	DIODE	1	
D4901	MAZ4051NMF	DIODE	1	
D4902	MAZ4051NMF	DIODE	1	
D4903	B0EADD000002	DIODE	1	
D4905	B0EADD000002	DIODE	1	
D7301	B0EADD000002	DIODE	1	
D7503	B0JACE000001	DIODE	1	
D7601	MAZ43000MF	DIODE	1	
DP7501	A2BB00000116	DISPLAY FIP	1	
FL7301	J0HACK000009	EMI-FILTER	1	
IC0701	C1AA00000606	IC	1	*1, *2, *3
IC0701	C1AB00001598	IC	1	*4
IC1501	B3EZ00000001	IC	1	
IC1502	B3EZ00000001	IC	1	
IC2501	AN3811NK-P	IC	1	
IC3001	C1AB00001739	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC4501	AN3656NFBPBV	IC	1	
IC4502	HCF4053M013TR	IC	1	
IC4901	C1AB00001614	IC	1	
IC4902	C1AB00001466	IC	1	
IC4903	C1AB00001466	IC	1	
IC4904	C1AB00001466	IC	1	
IC4905	B3RAE0000023	IC	1	
IC6001	C2CBJG000327	IC	1	
IC6002	C3EAGC000015	IC	1	
IC6003	C1AB00001293	IC	1	
IC6101	MN101C35DPG	IC	1	
IC7301	C1AB00001404	IC	1	
IC7503	C0EBE0000120	IC	1	
IC7504	C0EAH0000077	IC	1	
IC8801	C1AB00001759	IC	1	*4
JK4902	K2HZ242B0002	SCART CONNECTOR	1	
JK4903	K1CB104B0017	SVHS CONNECTOR	1	
JK4904	K2HA306B0071	3 CYNCH CONNECTOR	1	
K0701	ECJ1VC1H560J	CHIP CAPACITOR	1	*3
K0703	ERJ3GEY0R00V	CHIP RESISTOR	1	*2, *3
K0707	ERJ3GEY0R00V	CHIP RESISTOR	1	*1, *2, *3
K0709	ERJ3GEY0R00V	CHIP RESISTOR	1	*1, *2, *3
K4002	ERJ6GEY0R00Z	CHIP RESISTOR	1	
K6004	ERJ3GEY0R00V	CHIP RESISTOR	1	*1, *2, *3
K7601	ERJ3GEY0R00V	CHIP RESISTOR	1	*2
K7603	ERJ3GEY0R00V	CHIP RESISTOR	1	*4
K7604	ERJ3GEY0R00V	CHIP RESISTOR	1	*4
L0701	ELJNAR22JF	CHIP INDUCTOR	1	*1
L0701	ELJNAR27JF	CHIP INDUCTOR	1	*2, *3
L0702	ELJNAR18JF	CHIP INDUCTOR	1	*4
L0703	ELJNA1R8JF	CHIP INDUCTOR	1	*1
L0703	ELJNA2R2JF	CHIP INDUCTOR	1	*2, *3
L0703	ELJNAR68JF	CHIP INDUCTOR	1	*4
L0704	ELJFA151KF	CHIP INDUCTOR	1	*4
L0705	ELJFA151KF	CHIP INDUCTOR	1	*4
L0706	ELJFA151KF	CHIP INDUCTOR	1	*4
L0707	ELJFA151KF	CHIP INDUCTOR	1	*4
L2501	G0C680JA0019	CHOKE COIL AXIAL	1	
L3002	G0C820JA0019	CHOKE COIL AXIAL	1	
L3003	G0C270JA0019	CHOKE COIL AXIAL	1	
L3004	G0C680JA0019	CHOKE COIL AXIAL	1	
L3005	G0C270JA0019	CHOKE COIL AXIAL	1	
L3006	G1C120J00001	FIXED INDUCTOR	1	
L3010	G0C390JA0019	CHOKE COIL AXIAL	1	
L4002	G0C680JA0019	CHOKE COIL AXIAL	1	
L4502	G0C1R2J00004	CHOKE COIL AXIAL	1	
L4504	G0C181JA0019	CHOKE COIL AXIAL	1	
L4905	G0C270JA0019	CHOKE COIL AXIAL	1	
L4906	G0C680JA0019	CHOKE COIL AXIAL	1	
L4907	G0C270JA0019	CHOKE COIL AXIAL	1	
L5001	G0C680JA0019	CHOKE COIL AXIAL	1	
L6001	G0C101JA0019	CHOKE COIL AXIAL	1	
L6002	G0C330JA0019	CHOKE COIL AXIAL	1	*2, *4
L6005	G0C2R2JA0019	CHOKE COIL AXIAL	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L6006	G0C680JA0019	CHOKE COIL AXIAL	1	
L6101	G0C680JA0019	CHOKE COIL AXIAL	1	
L7301	G0C1R0JA0019	CHOKE COIL AXIAL	1	
L7601	G0C270JA0019	CHOKE COIL AXIAL	1	*1, *2, *3
L7602	G0C270JA0019	CHOKE COIL AXIAL	1	
L7603	G0C270JA0019	CHOKE COIL AXIAL	1	*1, *2, *3
L7604	G0C2R2JA0019	CHOKE COIL AXIAL	1	
L7605	G0C390JA0019	CHOKE COIL AXIAL	1	*1, *2, *3
L7605	G0C270JA0019	CHOKE COIL AXIAL	1	*4
L7608	G0C2R2JA0019	CHOKE COIL AXIAL	1	
L8801	G0C100JA0019	CHOKE COIL AXIAL	1	*4
L8802	G0C271JA0019	CHOKE COIL AXIAL	1	*4
LB0701	J0JBC0000041	BEAD CORE	1	*2
LB1001	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB4001	J0JBC0000070	CHIP INDUCTOR	1	
LB4002	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB4003	J0JBC0000070	CHIP INDUCTOR	1	
LB4004	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB4301	ERJ3GEYJ221V	CHIP RESISTOR	1	
LB4302	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB4303	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB4304	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB4305	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB4306	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB4307	J0JCC0000062	BEAD CORE	1	
LB4308	J0JCC0000062	BEAD CORE	1	
LB4309	J0JCC0000062	BEAD CORE	1	
LB4901	ERJ3GEYJ221V	CHIP RESISTOR	1	
LB4902	ERJ3GEYJ221V	CHIP RESISTOR	1	
LB4903	ERJ3GEYJ221V	CHIP RESISTOR	1	
LB4904	ERJ3GEYJ221V	CHIP RESISTOR	1	
LB4905	ERJ3GEYJ221V	CHIP RESISTOR	1	
LB4906	ERJ3GEYJ221V	CHIP RESISTOR	1	
LB4910	ERJ3GEYJ221V	CHIP RESISTOR	1	
LB4911	ERJ3GEYJ221V	CHIP RESISTOR	1	
LB7301	ERJ6GEY0R00Z	CHIP RESISTOR	1	
LB7302	J0JBC0000011	BEAD CORE	1	
P1001	K1KB13A00020	CONNECTOR 13POL	1	
P1501	K1KB02A00035	CONNECTOR	1	
P2501	K1KA12A00127	CONNECTOR	1	
P2502	K1MN09A00023	CONNECTOR	1	
P4002	K1KB02A00035	CONNECTOR	1	
P4003	K1MN06A00035	CONNECTOR	1	
P4301	K1KA22A00044	CONNECTOR	1	
P5001	K1MN10A00037	CONNECTOR	1	
PK0701	K1MR09A00028	CONNECTOR	1	
PP0701	K1KA04B00135	CONNECTOR	1	
PS7501	K1KB10A00065	CONNECTOR 10POL	1	
PS7502	K1KB06A00051	CONNECTOR 6POL	1	
Q0702	2SD0601ASL	TRANSISTOR	1	
Q0703	2SB0709ARL	TRANSISTOR	1	*4
Q1001	B1AAGD000006	TRANSISTOR	1	
Q1002	B1AAGD000006	TRANSISTOR	1	
Q1003	B1AAGD000006	TRANSISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q1004	B1AAGD000006	TRANSISTOR	1	
Q1005	2SD0601ARN	TRANSISTOR	1	
Q1201	B1AAGD000006	TRANSISTOR	1	
Q1202	B1AAGD000006	TRANSISTOR	1	
Q1203	B1AAGD000006	TRANSISTOR	1	
Q1501	PNB2301MBV	TRANSISTOR	1	
Q1502	PNB2301MAV	TRANSISTOR	1	
Q3001	2SD0601ARN	TRANSISTOR	1	
Q4003	2SD0601ARN	TRANSISTOR	1	
Q4004	2SD0601ARN	TRANSISTOR	1	
Q4005	2SD0602ARL	TRANSISTOR	1	
Q4006	2SB0710ARL	TRANSISTOR	1	
Q4901	2SD0601ARN	TRANSISTOR	1	
Q4903	2SD0601ARN	TRANSISTOR	1	
Q4904	2SD0601ARN	TRANSISTOR	1	
Q4905	2SD0601ARN	TRANSISTOR	1	
Q4906	2SD0601ARN	TRANSISTOR	1	
Q4907	2SD0601ARN	TRANSISTOR	1	
Q4908	2SD0601ARN	TRANSISTOR	1	
Q4909	2SB0709ARL	TRANSISTOR	1	
Q6001	2SD0601ARN	TRANSISTOR	1	
Q6002	2SD0601ARN	TRANSISTOR	1	
Q6003	2SB0709ARL	TRANSISTOR	1	*2, *4
Q8801	2SD0601ARN	TRANSISTOR	1	*4
QR0702	B1GBHBHH0002	TRANSISTOR	1	*4
QR1201	B1GBCFNN0004	TRANSISTOR	1	
QR1202	B1GDCFJJ0002	TRANSISTOR	1	
QR3006	UNR221100L	TRANSISTOR	1	*4
QR4001	UNR221100L	TRANSISTOR	1	
QR4002	UNR211300L	TRANSISTOR	1	
QR4005	UNR221100L	TRANSISTOR	1	
QR4501	XN0121600L	TRANSISTOR	1	
QR4502	UNR211300L	TRANSISTOR	1	
QR4503	XN0121600L	TRANSISTOR	1	
QR4504	B1GBCFGA0002	TRANSISTOR	1	*1, *2, *3
QR4507	UNR221100L	TRANSISTOR	1	
QR4901	B1GBCFNN0004	TRANSISTOR	1	
QR4902	B1GBCFNN0004	TRANSISTOR	1	
QR4903	UNR221400L	TRANSISTOR	1	
QR4904	B1GBCFJA0002	TRANSISTOR	1	
QR4905	B1GBCFJA0002	TRANSISTOR	1	
QR4906	UNR221400L	TRANSISTOR	1	
QR4907	UNR211300L	TRANSISTOR	1	
QR4908	XN0121100L	TRANSISTOR	1	
QR6001	B1GBCFJA0002	TRANSISTOR	1	
QR6101	B1GBCFGA0002	TRANSISTOR	1	
QR6102	B1GBCFGA0002	TRANSISTOR	1	
QR8801	UNR221100L	TRANSISTOR	1	*4
QR8802	B1GDCFJJ0002	TRANSISTOR	1	*4
QR8803	B1GDCFJJ0002	TRANSISTOR	1	*4
QR8804	UNR221100L	TRANSISTOR	1	*4
R0701	ERJ6GEYJ104V	CHIP RESISTOR	1	*1
R0705	ERJ3GEYJ472V	CHIP RESISTOR	1	*1, *2, *3
R0706	ERJ3GEYJ223V	CHIP RESISTOR	1	*4

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R0707	ERJ3GEYJ393V	CHIP RESISTOR	1	*1, *2, *3
R0707	ERJ6GEYJ223V	CHIP RESISTOR	1	*4
R0708	ERJ3GEYJ332V	CHIP RESISTOR	1	*1, *2, *3
R0708	ERJ6GEYJ562V	CHIP RESISTOR	1	*4
R0709	ERJ6GEYJ104V	CHIP RESISTOR	1	*2
R0709	ERJ6GEYJ223V	CHIP RESISTOR	1	*4
R0710	ERJ6GEYJ223V	CHIP RESISTOR	1	*4
R0711	ERJ3GEYJ181V	CHIP RESISTOR	1	*1, *2, *3
R0711	ERJ3GEYJ562V	CHIP RESISTOR	1	*4
R0713	ERJ3GEY0R00V	CHIP RESISTOR	1	*1, *2, *3
R0713	ERJ3GEYG181V	CHIP RESISTOR	1	*4
R0714	ERJ3GEYJ562V	CHIP RESISTOR	1	*2
R0715	ERJ3GEYJ223V	CHIP RESISTOR	1	*1, *2, *3
R0717	ERJ3GEYJ471V	CHIP RESISTOR	1	*1, *2, *3
R0717	ERJ3GEYG562V	CHIP RESISTOR	1	*4
R0719	ERJ3GEYJ472V	CHIP RESISTOR	1	*1, *2, *3
R0722	ERJ3GEYJ562V	CHIP RESISTOR	1	*4
R0724	ERJ8GEYJ151V	CHIP RESISTOR	1	*4
R0725	ERJ6GEYJ101Z	CHIP RESISTOR	1	*1, *2, *3
R0726	ERJ3GEYJ561V	CHIP RESISTOR	1	*4
R0727	ERJ3GEY0R00V	CHIP RESISTOR	1	*1, *2, *3
R0727	ERJ6GEYJ101Z	CHIP RESISTOR	1	*4
R0728	ERJ3GEY0R00V	CHIP RESISTOR	1	*1
R0729	ERJ3GEYJ103V	CHIP RESISTOR	1	1*, *3
R0730	ERJ6GEYJ103V	CHIP RESISTOR	1	*3
R0731	ERJ3GEYJ101V	CHIP RESISTOR	1	*2
R0732	ERJ3GEYJ472V	CHIP RESISTOR	1	*2
R0732	ERJ8GEYJ102V	CHIP RESISTOR	1	*4
R0733	ERJ3GEYG393V	CHIP RESISTOR	1	*4
R0734	ERJ3GEYG682V	CHIP RESISTOR	1	*4
R0735	ERJ3GEYJ101V	CHIP RESISTOR	1	*4
R0737	ERJ6GEYJ101Z	CHIP RESISTOR	1	*4
R0738	ERJ3GEY0R00V	CHIP RESISTOR	1	*4
R0740	ERJ3GEYG471V	CHIP RESISTOR	1	*1, *3
R0740	ERJ3GEYG271V	CHIP RESISTOR	1	*2
R0741	ERJ3GEYJ221V	CHIP RESISTOR	1	*1, *2, *3
R0741	ERJ6GEY0R00Z	CHIP RESISTOR	1	*4
R0742	ERJ8GEYJ151V	CHIP RESISTOR	1	*1, *2, *3
R0745	ERJ6GEYJ335V	CHIP RESISTOR	1	*1, *2, *3
R0750	ERJ6GEYG562V	CHIP RESISTOR	1	*4
R0755	ERJ6GEYJ101Z	CHIP RESISTOR	1	*4
R0756	ERJ6GEYJ101Z	CHIP RESISTOR	1	*4
R0757	ERJ3GEYJ752V	CHIP RESISTOR	1	*4
R1002	ERDS2TJ471T	CARBON RESISTOR	1	
R1003	ERDS2TJ331T	CARBON RESISTOR	1	
R1004	ERJ3GEYJ103V	CHIP RESISTOR	1	
R1005	ERJ3GEYJ331V	CHIP RESISTOR	1	
R1006	ERDS2TJ331T	CARBON RESISTOR	1	
R1008	ERDS2TJ332T	CARBON RESISTOR	1	
R1009	ERDS2TJ471T	CARBON RESISTOR	1	
R1010	ERJ3GEYJ220V	CHIP RESISTOR	1	
R1209	ERDS2TJ471T	CARBON RESISTOR	1	
R1501	ERJ3GEYJ121V	CHIP RESISTOR	1	
R1502	ERJ3GEYJ181V	CHIP RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R1503	ERJ3GEYJ273V	CHIP RESISTOR	1	
R1504	ERJ3GEYJ273V	CHIP RESISTOR	1	
R1506	ERJ3GEYJ101V	CHIP RESISTOR	1	
R2501	ERJ3GEY0R00V	CHIP RESISTOR	1	
R2502	ERJ3GEYJ222V	CHIP RESISTOR	1	
R2503	ERJ3GEYJ103V	CHIP RESISTOR	1	
R2504	ERJ3GEYJ103V	CHIP RESISTOR	1	
R2505	ERJ3GEYJ392V	CHIP RESISTOR	1	
R2506	ERJ3GEYJ105V	CHIP RESISTOR	1	
R2507	ERJ3GEYJ274V	CHIP RESISTOR	1	
R2508	ERJ3GEYG433V	CHIP RESISTOR	1	
R2509	ERJ3GEYJ331V	CHIP RESISTOR	1	
R2510	ERDS2TJ330T	CARBON RESISTOR	1	
R2511	ERDS2TJ330T	CARBON RESISTOR	1	
R2512	ERJ3GEYJ102V	CHIP RESISTOR	1	
R2515	ERDS2TJ330T	CARBON RESISTOR	1	
R2516	ERJ6GEYJ1R5V	CHIP RESISTOR	1	
R2517	ERJ6GEYJ1R2V	CHIP RESISTOR	1	
R3001	ERJ3GEYJ152V	CHIP RESISTOR	1	
R3002	ERJ3GEYJ622V	CHIP RESISTOR	1	
R3004	ERJ3GEYJ562V	CHIP RESISTOR	1	
R3005	ERJ3GEY0R00V	CHIP RESISTOR	1	
R3006	ERJ3GEYJ101V	CHIP RESISTOR	1	*4
R3007	ERJ3GEYJ182V	CHIP RESISTOR	1	*4
R3009	ERJ3GEYJ153V	CHIP RESISTOR	1	
R3010	ERJ3GEYJ103V	CHIP RESISTOR	1	
R3011	ERJ3GEYJ102V	CHIP RESISTOR	1	
R3012	ERJ3GEYJ102V	CHIP RESISTOR	1	
R3013	ERJ3GEYJ273V	CHIP RESISTOR	1	
R3014	ERJ3GEYJ471V	CHIP RESISTOR	1	
R3017	ERJ3GEYJ102V	CHIP RESISTOR	1	
R3027	ERJ3GEYJ332V	CHIP RESISTOR	1	
R3028	ERJ3GEY0R00V	CHIP RESISTOR	1	
R3030	ERJ3GEYJ106V	CHIP RESISTOR	1	
R3035	ERJ3GEY0R00V	CHIP RESISTOR	1	*4
R3037	ERJ3GEY0R00V	CHIP RESISTOR	1	*4
R3040	ERJ3GEYJ472V	CHIP RESISTOR	1	*4
R3041	ERJ3GEYJ122V	CHIP RESISTOR	1	
R4001	ERJ3GEYJ332V	CHIP RESISTOR	1	
R4002	ERJ3GEYJ104V	CHIP RESISTOR	1	
R4003	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4004	ERJ3GEYJ221V	CHIP RESISTOR	1	
R4006	ERJ3GEYJ183V	CHIP RESISTOR	1	
R4007	ERJ3GEYJ103V	CHIP RESISTOR	1	
R4008	ERJ3GEYJ334V	CHIP RESISTOR	1	
R4009	ERJ3GEYJ333V	CHIP RESISTOR	1	
R4010	ERJ3GEYJ103V	CHIP RESISTOR	1	
R4011	ERJ3GEYJ243V	CHIP RESISTOR	1	
R4012	ERJ3GEYJ821V	CHIP RESISTOR	1	
R4013	ERJ3GEYJ101V	CHIP RESISTOR	1	
R4014	ERJ3GEYJ123V	THICK FILM / CHIP RESISTOR	1	
R4015	ERJ3GEYJ222V	CHIP RESISTOR	1	
R4016	ERJ3GEYJ222V	CHIP RESISTOR	1	
R4017	ERJ3GEYJ332V	CHIP RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4018	ERJ3GEYJ472V	CHIP RESISTOR	1	
R4019	ERJ3GEYJ682V	CHIP RESISTOR	1	
R4301	ERJ3GEY0R00V	CHIP RESISTOR	1	
R4302	ERJ3GEY0R00V	CHIP RESISTOR	1	
R4303	ERJ3GEY0R00V	CHIP RESISTOR	1	
R4501	ERJ3GEYJ683V	CHIP RESISTOR	1	
R4502	ERJ3GEYJ562V	CHIP RESISTOR	1	
R4503	ERJ3GEYJ683V	CHIP RESISTOR	1	
R4504	ERJ3GEYJ562V	CHIP RESISTOR	1	
R4505	ERJ3GEYJ562V	CHIP RESISTOR	1	
R4506	ERJ3GEYJ362V	CHIP RESISTOR	1	
R4507	ERJ3GEYJ683V	CHIP RESISTOR	1	
R4508	ERJ3GEYJ103V	CHIP RESISTOR	1	
R4509	ERJ3GEYJ683V	CHIP RESISTOR	1	
R4510	ERJ3GEYJ103V	CHIP RESISTOR	1	
R4511	ERJ3GEYJ562V	CHIP RESISTOR	1	
R4512	ERJ3GEYJ683V	CHIP RESISTOR	1	
R4513	ERJ3GEYJ103V	CHIP RESISTOR	1	
R4514	ERJ3GEYJ562V	CHIP RESISTOR	1	
R4515	ERJ3GEYJ472V	CHIP RESISTOR	1	
R4516	ERJ3GEYJ511V	CHIP RESISTOR	1	
R4517	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4518	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4519	ERJ3GEYJ821V	CHIP RESISTOR	1	
R4520	ERJ3GEYJ124V	CHIP RESISTOR	1	
R4521	ERJ3GEYJ511V	CHIP RESISTOR	1	
R4522	ERJ3GEYJ303V	CHIP RESISTOR	1	
R4523	ERJ3GEYJ472V	CHIP RESISTOR	1	
R4524	ERJ3GEYJ102V	CHIP RESISTOR	1	
R4525	ERJ3GEYJ102V	CHIP RESISTOR	1	
R4526	ERJ3GEYJ221V	CHIP RESISTOR	1	
R4527	ERJ3GEYJ683V	CHIP RESISTOR	1	
R4528	ERJ3GEYJ391V	CHIP RESISTOR	1	*1, *2, *3
R4529	ERJ3GEYJ221V	CHIP RESISTOR	1	
R4530	ERJ3GEYJ104V	CHIP RESISTOR	1	
R4531	ERJ3GEYJ221V	CHIP RESISTOR	1	
R4532	ERJ3GEYJ104V	CHIP RESISTOR	1	
R4533	ERJ3GEYJ683V	CHIP RESISTOR	1	
R4534	ERJ3GEYJ622V	CHIP RESISTOR	1	
R4535	ERJ3GEYJ104V	CHIP RESISTOR	1	
R4536	ERJ3GEYJ473V	CHIP RESISTOR	1	
R4537	ERJ3GEYJ221V	CHIP RESISTOR	1	
R4538	ERJ3GEYJ102V	CHIP RESISTOR	1	
R4539	ERJ3GEYJ562V	CHIP RESISTOR	1	
R4540	ERJ3GEYJ683V	CHIP RESISTOR	1	
R4541	ERJ3GEYJ104V	CHIP RESISTOR	1	
R4549	ERJ3GEYJ472V	CHIP RESISTOR	1	
R4550	ERJ3GEYJ683V	CHIP RESISTOR	1	
R4551	ERJ3GEYJ472V	CHIP RESISTOR	1	
R4552	ERJ3GEYJ683V	CHIP RESISTOR	1	
R4553	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4901	ERJ3GEYF750V	CHIP RESISTOR	1	
R4902	ERDS2TJ471T	CARBON RESISTOR	1	
R4903	ERJ3GEYJ472V	CHIP RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4904	ERJ3GEYJ153V	CHIP RESISTOR	1	
R4905	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4906	ERJ3GEYJ331V	CHIP RESISTOR	1	
R4907	ERJ3GEYJ123V	THICK FILM / CHIP RESISTOR	1	
R4908	ERJ3GEYF750V	CHIP RESISTOR	1	
R4909	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4911	ERJ3GEYJ750V	CHIP RESISTOR	1	
R4912	ERJ3GEYJ331V	CHIP RESISTOR	1	
R4913	ERJ3GEYF750V	CHIP RESISTOR	1	
R4914	ERJ3GEYJ750V	CHIP RESISTOR	1	
R4915	ERJ3GEYJ183V	CHIP RESISTOR	1	
R4916	ERJ3GEYJ331V	CHIP RESISTOR	1	
R4917	ERDS2TJ471T	CARBON RESISTOR	1	
R4918	ERJ3GEYJ331V	CHIP RESISTOR	1	
R4919	ERJ3GEYF750V	CHIP RESISTOR	1	
R4920	ERJ3GEYJ474V	CHIP RESISTOR	1	
R4921	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4922	ERJ3GEYF750V	CHIP RESISTOR	1	
R4925	ERJ3GEYF750V	CHIP RESISTOR	1	
R4926	ERJ3GEYF471V	RESISTOR	1	
R4927	ERJ3GEYF511V	RESISTOR	1	
R4928	ERJ3GEYJ471V	CHIP RESISTOR	1	
R4929	ERJ3GEYJ750V	CHIP RESISTOR	1	
R4930	ERJ3GEYJ750V	CHIP RESISTOR	1	
R4931	ERJ3GEYJ750V	CHIP RESISTOR	1	
R4932	ERJ3GEYJ750V	CHIP RESISTOR	1	
R4934	ERJ3GEYF750V	CHIP RESISTOR	1	
R4935	ERJ3GEYF750V	CHIP RESISTOR	1	
R4936	ERJ3GEYF750V	CHIP RESISTOR	1	
R4938	ERJ3GEYJ221V	CHIP RESISTOR	1	
R4941	ERJ3GEYJ103V	CHIP RESISTOR	1	
R4947	ERJ3GEYJ103V	CHIP RESISTOR	1	
R4948	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4949	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4950	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4951	ERJ3GEYJ223V	CHIP RESISTOR	1	
R4952	ERJ3GEYJ103V	CHIP RESISTOR	1	
R4958	ERJ3GEYJ471V	CHIP RESISTOR	1	
R4959	ERJ3GEYJ471V	CHIP RESISTOR	1	
R4960	ERJ3GEYJ102V	CHIP RESISTOR	1	
R4961	ERJ3GEYJ101V	CHIP RESISTOR	1	
R4962	ERJ3GEYJ101V	CHIP RESISTOR	1	
R4963	ERJ3GEYJ471V	CHIP RESISTOR	1	
R4964	ERJ3GEYJ102V	CHIP RESISTOR	1	
R4965	ERJ3GEYJ102V	CHIP RESISTOR	1	
R4966	ERJ3GEYJ104V	CHIP RESISTOR	1	
R4967	ERJ3GEYJ102V	CHIP RESISTOR	1	
R6002	ERJ3GEYJ102V	CHIP RESISTOR	1	
R6003	ERJ3GEYJ183V	CHIP RESISTOR	1	
R6004	ERJ3GEY0R00V	CHIP RESISTOR	1	
R6005	ERJ3GEYJ224V	CHIP RESISTOR	1	
R6006	ERJ3GEYJ152V	CHIP RESISTOR	1	*2, *4
R6007	ERJ3GEYJ473V	CHIP RESISTOR	1	*1, *3
R6008	ERJ3GEYJ101V	CHIP RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6009	ERJ3GEYJ223V	CHIP RESISTOR	1	
R6011	ERJ3GEYJ221V	CHIP RESISTOR	1	
R6012	ERJ3GEYJ221V	CHIP RESISTOR	1	
R6013	ERJ3GEYJ221V	CHIP RESISTOR	1	
R6014	ERJ3GEYJ221V	CHIP RESISTOR	1	
R6015	ERJ3GEYJ121V	CHIP RESISTOR	1	
R6017	ERJ3GEYJ102V	CHIP RESISTOR	1	
R6019	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6020	ERJ3GEYJ393V	CHIP RESISTOR	1	
R6021	ERJ3GEYJ273V	CHIP RESISTOR	1	
R6022	ERJ3GEYJ101V	CHIP RESISTOR	1	
R6023	ERJ3GEYJ273V	CHIP RESISTOR	1	
R6025	ERJ3GEYJ433V	CHIP RESISTOR	1	
R6026	ERJ3GEYJ393V	CHIP RESISTOR	1	
R6031	ERJ3GEYJ682V	CHIP RESISTOR	1	
R6039	ERJ3GEYJ102V	CHIP RESISTOR	1	
R6040	ERJ3GEYJ102V	CHIP RESISTOR	1	
R6041	ERJ3GEYJ102V	CHIP RESISTOR	1	
R6046	ERJ3GEYJ472V	CHIP RESISTOR	1	
R6047	ERJ3GEYJ472V	CHIP RESISTOR	1	
R6048	ERJ3GEYJ472V	CHIP RESISTOR	1	
R6049	ERJ3GEYJ221V	CHIP RESISTOR	1	
R6051	ERJ3GEYJ564V	CHIP RESISTOR	1	
R6052	ERJ3GEYJ221V	CHIP RESISTOR	1	
R6053	ERJ3GEYJ682V	CHIP RESISTOR	1	
R6054	ERJ3GEYJ125V	CHIP RESISTOR	1	
R6055	ERJ3GEYJ682V	CHIP RESISTOR	1	
R6056	ERJ3GEYJ125V	CHIP RESISTOR	1	
R6057	ERJ3GEYJ104V	CHIP RESISTOR	1	
R6077	ERJ3GEYJ105V	CHIP RESISTOR	1	
R6078	ERJ3GEYJ471V	CHIP RESISTOR	1	
R6082	ERJ3GEYJ121V	CHIP RESISTOR	1	
R6083	ERJ3GEYJ471V	CHIP RESISTOR	1	
R6084	ERJ3GEYJ471V	CHIP RESISTOR	1	
R6085	ERJ3GEY0R00V	CHIP RESISTOR	1	
R6104	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6105	ERJ3GEYJ303V	CHIP RESISTOR	1	
R6106	ERJ3GEYJ273V	CHIP RESISTOR	1	
R6107	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6108	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6109	ERJ3GEYJ473V	CHIP RESISTOR	1	
R6110	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6111	ERJ3GEYJ102V	CHIP RESISTOR	1	
R6112	ERJ3GEYJ102V	CHIP RESISTOR	1	
R6113	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6114	ERJ3GEY0R00V	CHIP RESISTOR	1	
R6115	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6116	ERJ3GEY0R00V	CHIP RESISTOR	1	
R6117	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6118	ERJ3GEYJ822V	CHIP RESISTOR	1	
R6119	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6120	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6121	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6122	ERJ3GEYJ103V	CHIP RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6123	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6124	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6125	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6126	ERJ3GEYJ103V	CHIP RESISTOR	1	
R6127	ERJ3GEYJ103V	CHIP RESISTOR	1	
R7301	ERJ3GEYJ822V	CHIP RESISTOR	1	
R7302	ERJ3GEY0R00V	CHIP RESISTOR	1	
R7304	ERJ3GEY0R00V	CHIP RESISTOR	1	
R7305	ERJ3GEYJ101V	CHIP RESISTOR	1	
R7306	ERJ3GEYJ101V	CHIP RESISTOR	1	
R7308	ERJ3GEYJ221V	CHIP RESISTOR	1	*1, *2, *3
R7313	ERJ3GEYJ221V	CHIP RESISTOR	1	*4
R7316	ERJ3GEYJ103V	CHIP RESISTOR	1	
R7328	ERJ3GEYJ221V	CHIP RESISTOR	1	
R7329	ERJ3GEYJ221V	CHIP RESISTOR	1	
R7501	ERDS2TJ2R2T	CARBON RESISTOR	1	
R7504	ERDS2TJ391T	CARBON RESISTOR	1	
R7534	ERJ3GEYJ181V	CHIP RESISTOR	1	
R7535	ERJ3GEYJ103V	CHIP RESISTOR	1	
R7536	ERJ3GEYJ472V	CHIP RESISTOR	1	
R7602	J0JCC0000062	BEAD CORE	1	*1, *2, *3
R7604	ERJ3GEYJ101V	CHIP RESISTOR	1	*1, *2, *3
R7605	ERJ3GEYJ101V	CHIP RESISTOR	1	*1, *2, *3
R7608	ERJ3GEYJ151V	CHIP RESISTOR	1	
R7611	ERJ3GEYJ101V	CHIP RESISTOR	1	
R7613	ERJ3GEYJ151V	CHIP RESISTOR	1	
R7615	ERJ3GEYJ101V	CHIP RESISTOR	1	
R7704	ERJ3GEYJ222V	CHIP RESISTOR	1	
R8801	ERJ3GEYJ103V	CHIP RESISTOR	1	*4
R8802	ERJ3GEYJ102V	CHIP RESISTOR	1	*4
R8803	ERJ3GEYJ124V	CHIP RESISTOR	1	*4
R8804	ERJ3GEYJ223V	CHIP RESISTOR	1	*4
R8805	ERJ3GEYJ562V	CHIP RESISTOR	1	*4
S1501	K0G934A00002	MODE SELECT SWITCH	1	
S7507	K0C111A00006	SAFETY TAB SWITCH	1	
T0701	EQV5EC083P	TRANSFORMER	1	*1
T0701	EQV5EC081P	TRANSFORMER	1	*2
T0701	EQV5EC082P	TRANSFORMER	1	*3
T4001	EQQ7QF024P	HIGH FREQUENCY COIL	1	
TU7601	ENG47328G1	TUNER	1	⚠ *1
TU7601	ENG47329G1	TUNER	1	⚠ *2
TU7601	ENG47327G1	TUNER	1	⚠ *3
TU7601	ENV57G04H6	TUNER	1	⚠ *4
VR0701	EVNCYAA03B14	VARIABLE RESISTOR	1	
W753	J0JCC0000071	BEAD CORE	1	
X0701	J0B4155A0003	CRISTAL OSCILLATOR	1	*1
X0701	J0B3955A0001	CRISTAL OSCILLATOR	1	*2
X0701	J0B4045A0002	CRISTAL OSCILLATOR	1	*3
X0702	J0B4055A0001	CRISTAL OSCILLATOR	1	*2

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
X0704	VLF1495	FILTER	1	*1
X0704	VLF1497	FILTER	1	*2
X0704	VLF1493	FILTER	1	*3
X0704	J0B4045A0002	CRISTAL OSCILLATOR	1	*4
X0706	EFCKK9453M	CAPACITOR	1	*4
X0707	EFCKG3958M	CAPACITOR	1	*4
X3001	H0D443400039	CRYSTAL OSCILLATOR	1	
X6001	H0A120500002	CRYSTAL OSCILLATOR	1	
X6002	VSX1022	QUARZ	1	
X6101	H2D800400009	CERAMIC OSCILLATOR	1	
X7302	H0D245500011	QUARZ	1	
		MISCELLANEOUS		
ZA3002	VSC4998	SHIELD CASE	1	
	VMX2233	PCB SUPPORT	3	
	VMP4471-1	ANGLE	1	
■	VEP01932A	POWER PCB	1	(RTL)
C1122	F1BAF1020020	CAPACITOR	1	⚠
C1124	F1BAF1020020	CAPACITOR	1	⚠
C1125	F0CAF683A019	EMI CAPACITOR	1	⚠
C1141	ECEC2GG680FZ	CAPACITOR	1	
C1151	ECQB1H223JF3	PLAST FILM CAPACITOR	1	
C1152	ECQB1H103JF3	PLAST FILM CAPACITOR	1	
C1153	ECQV1H104JL3	PLAST FILM CAPACITOR	1	
C1154	ECQB1H223JF3	PLAST FILM CAPACITOR	1	
C1155	ECKN3A271KBP	CAPACITOR	1	
C1200	ECQV1H104JL3	PLAST FILM CAPACITOR	1	
C1210	ECKW3A332KBS	CERAMIC CAPACITOR	1	
C1220	EEUFG1A821B	CAPACITOR	1	
C1221	F2A1A2210012	ALU ELEC CAPACITOR	1	
C1230	EEUFG1H560B	CAPACITOR	1	
C1240	EEUFG1A182B	CAPACITOR	1	
C1241	F2A1A2210012	ALU ELEC CAPACITOR	1	
C1250	EEUFG1E821B	CAPACITOR	1	
C1251	ECA1EHJ101B	ALU ELEC CAPACITOR	1	
C1261	ECA1CHJ221B	ALU ELEC CAPACITOR	1	
C1262	EEUFG1C332B	CAPACITOR	1	
C1270	EEUFG1H560B	CAPACITOR	1	
C1280	EEUFG1E181B	CAPACITOR	1	
C1290	EEUFG1C391B	CAPACITOR	1	
C1291	F2A1C1010033	ALU ELEC CAPACITOR	1	
C1301	F1H1E104A030	CHIP CAPACITOR	1	
C1320	F2A0J221A016	ALU ELEC CAPACITOR	1	
C1321	F1H1E104A030	CHIP CAPACITOR	1	
C1340	F2A1C221A019	ALU ELEC CAPACITOR	1	
C1360	F2A0J221A016	ALU ELEC CAPACITOR	1	
C1361	F2A0J471A016	ALU ELEC CAPACITOR	1	
C1362	F2A1A470A140	ALU ELEC CAPACITOR	1	
C1363	F2A1E4R7A122	ALU ELEC CAPACITOR	1	
C1364	F1H1H103A220	CHIP CAPACITOR	1	
C1365	F1H1H103A220	CHIP CAPACITOR	1	
C1366	F2A1V100A117	ALU ELEC CAPACITOR	1	
C1370	F2A1C221A019	ALU ELEC CAPACITOR	1	
C1390	F2A1C221A019	ALU ELEC CAPACITOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D1110	ERZVA5V471	SURGE ABSORBER	1	⚠
D1140	B0KB00000013	DIODE	1	
D1152	MA2C18500E	DIODE	1	
D1155	B0EADD000002	DIODE	1	
D1157	MAZ40360MF	DIODE	1	
D1180	MAZ751000C	DIODE	1	
D1210	B0HAGM000006	DIODE	1	
D1220	B0JAME000025	DIODE	1	
D1230	MA2C18500E	DIODE	1	
D1240	B0JAME000025	DIODE	1	
D1250	B0JAMK000015	DIODE	1	
D1251	B0JAMK000015	DIODE	1	
D1260	B0JARE000014	DIODE	1	
D1261	B0JARE000014	DIODE	1	
D1270	MA2C18500E	DIODE	1	
D1280	B0JAME000025	DIODE	1	
D1290	B0JAMG000010	DIODE	1	
D1360	MAZ4056NHF	DIODE	1	
D1361	MAZ4056NHF	DIODE	1	
D1362	MAZ4270NOF	DIODE	1	
D1370	MAZ409100F	DIODE	1	
F1101	K5D162BL0007	MINIATURE FUSE	1	⚠
IC1200	C0DAEJC00003	IC	1	
IC1320	C0CAAYA00005	IC	1	
IC1340	C0DBCGE00002	IC	1	
IC1390	C0DAEGG00003	IC	1	
IP1220	UNH000700A	IC PROTECTOR	1	⚠
IP1240	UNH000700A	IC PROTECTOR	1	⚠
IP1280	D4FAR4000001	IC PROTECTOR	1	⚠
L1120	ELF15N003AB	LINE FILTER	1	⚠
L1121	ELF15N003AB	LINE FILTER	1	⚠
L1220	G0A220G00021	FIXED INDUCTOR	1	
L1240	G0A220G00021	FIXED INDUCTOR	1	
L1250	G0A220G00021	FIXED INDUCTOR	1	
L1260	G0A220G00021	FIXED INDUCTOR	1	
L1290	G0A220G00021	FIXED INDUCTOR	1	
L1370	G0C221JA0019	CHOKE COIL AXIAL	1	
L1390	G0C221JA0019	CHOKE COIL AXIAL	1	
LB1214	J0JHC0000070	BEAD CORE	1	
LB1216	J0JKB0000003	BEAD CORE	1	
LB1217	J0JKB0000003	BEAD CORE	1	
LB1218	J0JHC0000070	BEAD CORE	1	
LR1150	J1ZZA0000001	BEAD CORE	1	
P1101	K2AA2H000007	AC INLET	1	⚠
PP1302	K1KA14A00134	CONNECTOR	1	
PP1303	K1KA02A00229	2PIN CONNECTOR	1	
PS1301	K1KA13A00074	CONNECTOR	1	
Q1150	B1DEDR000003	TRANSISTOR	1	
Q1151	2SD1992ARA	TRANSISTOR	1	
Q1152	2SC3311ASA	TRANSISTOR	1	
Q1153	B1DEDQ000014	TRANSISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q1200	B3PBA0000078	PHOTO COUPLER	1	⚠
Q1321	2SD19960SA	TRANSISTOR	1	
Q1322	2SD19960SA	TRANSISTOR	1	
Q1360	B1AAGD000006	TRANSISTOR	1	
Q1361	B1AAGD000006	TRANSISTOR	1	
Q1371	2SD0601ARN	TRANSISTOR	1	
QR1300	UNR211300L	TRANSISTOR	1	
QR1302	B1GBCFNN0004	TRANSISTOR	1	
R1150	ERDS2TJ105T	CARBON RESISTOR	1	
R1153	ERG2SJ331E	METAL OXIDE RESISTOR	1	
R1154	ERDS2TJ105T	CARBON RESISTOR	1	
R1155	ERJ3GEYJ104V	CHIP RESISTOR	1	
R1156	ERJ3GEYJ330V	CHIP RESISTOR	1	
R1157	ERJ3GEYF392V	RESISTOR	1	
R1158	ERJ3GEYJ331V	CHIP RESISTOR	1	
R1159	ERJ3GEYJ3R3V	CHIP RESISTOR	1	
R1160	ERX1SJR51E	METAL RESISTOR	1	
R1161	ERDS2TJ101T	CARBON RESISTOR	1	
R1162	ERDS2FJ102T	CARBON RESISTOR	1	
R1163	ERDS2FJ101T	CARBON RESISTOR	1	
R1200	ERJ3GEYG333V	CHIP RESISTOR	1	
R1201	ERJ3GEYG333V	CHIP RESISTOR	1	
R1202	ERJ3GEYG222V	CHIP RESISTOR	1	
R1203	ERJ3GEYG223V	CHIP RESISTOR	1	
R1204	ERJ3GEYJ123V	THICK FILM / CHIP RESISTOR	1	
R1205	ERJ3GEYJ222V	CHIP RESISTOR	1	
R1206	ERJ3GEYJ271V	CHIP RESISTOR	1	
R1207	ERJ3GEYG822V	CHIP RESISTOR	1	
R1208	ERJ3GEYG563V	CHIP RESISTOR	1	
R1230	ERJ3GEYJ473V	CHIP RESISTOR	1	
R1240	ERJ3GEYJ472V	CHIP RESISTOR	1	
R1290	ERJ3GEYJ103V	CHIP RESISTOR	1	
R1310	ERJ3GEYG472V	CHIP RESISTOR	1	
R1311	ERJ3GEYG182V	CHIP RESISTOR	1	
R1312	ERJ3GEYJ562V	CHIP RESISTOR	1	
R1323	ERJ3GEYJ221V	CHIP RESISTOR	1	
R1324	ERJ3GEYJ821V	CHIP RESISTOR	1	
R1325	ERJ3GEYJ1R0V	CHIP RESISTOR	1	
R1326	ERJ3GEYJ1R0V	CHIP RESISTOR	1	
R1327	ERJ3GEYJ101V	CHIP RESISTOR	1	
R1329	ERJ3GEY0R00V	CHIP RESISTOR	1	
R1333	ERJ3GEYJ1R0V	CHIP RESISTOR	1	
R1334	ERJ3GEYJ1R0V	CHIP RESISTOR	1	
R1335	ERJ3GEYJ1R0V	CHIP RESISTOR	1	
R1336	ERJ3GEYJ1R0V	CHIP RESISTOR	1	
R1337	ERDS2TJ331T	CARBON RESISTOR	1	
R1360	ERDS2TJ471T	CARBON RESISTOR	1	
R1361	ERDS2TJ471T	CARBON RESISTOR	1	
R1370	ERJ3GEY0R00V	CHIP RESISTOR	1	
R1371	ERJ3GEYJ223V	CHIP RESISTOR	1	
R1372	ERDS2TJ122T	CARBON RESISTOR	1	
R1373	ERDS2TJ122T	CARBON RESISTOR	1	
T1150	ETS29AS1R6NC	TRANSFORMER	1	⚠

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
		MISCELLANEOUS		
ZA1103	EYF52BC	FUSE HOLDER	1	
ZA1104	EYF52BC	FUSE HOLDER	1	
	VMX2233	PCB SUPPORT	3	
■	VEP03G40A	AV DECODER PCB	1	(RTL)
C8001	F1H1E104A030	CHIP CAPACITOR	1	
C8002	F1H1E104A030	CHIP CAPACITOR	1	
C8003	F1H1E104A030	CHIP CAPACITOR	1	
C8004	F1H1E104A030	CHIP CAPACITOR	1	
C8005	F1H1E104A030	CHIP CAPACITOR	1	
C8006	F1H1E104A030	CHIP CAPACITOR	1	
C8007	F1H1C104A071	CHIP CAPACITOR	1	
C8008	F1H1C104A071	CHIP CAPACITOR	1	
C8009	F1H1C104A071	CHIP CAPACITOR	1	
C8010	F1H1C104A071	CHIP CAPACITOR	1	
C8011	F1H1H101A736	CHIP CAPACITOR	1	
C8012	ECUV1H102JCV	CHIP CAPACITOR	1	
C8013	ECJ1VC1H821J	CHIP CAPACITOR	1	
C8014	F1H1H472A219	CHIP CAPACITOR	1	
C8016	ECUV1H102JCV	CHIP CAPACITOR	1	
C8017	EEVHB0J330R	SMD ELEC CAPACITOR	1	
C8018	F2G0J331A015	CAPACITOR	1	
C8019	F2G0J331A015	CAPACITOR	1	
C8020	EEVFC0J101P	SMD ELEC CAPACITOR	1	
C8021	EEVHB0J101P	SMD ELEC CAPACITOR	1	
C8022	EEVFC0J101P	SMD ELEC CAPACITOR	1	
C8023	F1H1E104A030	CHIP CAPACITOR	1	
C8025	F1H1E104A030	CHIP CAPACITOR	1	
C8026	F1H1E104A030	CHIP CAPACITOR	1	
C8027	F1H1E104A030	CHIP CAPACITOR	1	
C8028	F1H1E104A030	CHIP CAPACITOR	1	
C8029	F1H1E104A030	CHIP CAPACITOR	1	
C8030	F1H1E104A030	CHIP CAPACITOR	1	
C8031	F1H1E104A030	CHIP CAPACITOR	1	
C8032	F1H1C104A071	CHIP CAPACITOR	1	
C8033	ECJ1VF1A105Z	CAPACITOR	1	
C8034	ECJ1VF1A105Z	CAPACITOR	1	
C8035	F1H1E104A030	CHIP CAPACITOR	1	
C8036	F1H1E104A030	CHIP CAPACITOR	1	
C8037	F1H1E104A030	CHIP CAPACITOR	1	
C8038	F1H1E104A030	CHIP CAPACITOR	1	
C8039	F1H1E104A030	CHIP CAPACITOR	1	
C8040	F1H1E104A030	CHIP CAPACITOR	1	
C8041	F1H1E104A030	CHIP CAPACITOR	1	
C8042	F1H1E104A030	CHIP CAPACITOR	1	
C8043	F1H1E104A030	CHIP CAPACITOR	1	
C8044	F1H1E104A030	CHIP CAPACITOR	1	
C8045	F1H1E104A030	CHIP CAPACITOR	1	
C8046	F1H1E104A030	CHIP CAPACITOR	1	
C8047	F1H1E104A030	CHIP CAPACITOR	1	
C8048	F1H1E104A030	CHIP CAPACITOR	1	
C8049	F1H1E104A030	CHIP CAPACITOR	1	
C8050	F1H1E104A030	CHIP CAPACITOR	1	
C8051	F1H1E104A030	CHIP CAPACITOR	1	

[illegible]	[illegible]	[illegible]	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C8052	F1H1E104A030	CHIP CAPACITOR	1	
C8053	F1H1E104A030	CHIP CAPACITOR	1	
C8054	F1H1E104A030	CHIP CAPACITOR	1	
C8055	F1H1E104A030	CHIP CAPACITOR	1	
C8056	F1H1E104A030	CHIP CAPACITOR	1	
C8057	F1H1E104A030	CHIP CAPACITOR	1	
C8058	F1H1E104A030	CHIP CAPACITOR	1	
C8059	F1H1E104A030	CHIP CAPACITOR	1	
C8060	F1H1H103A748	CHIP CAPACITOR	1	
C8061	F1H1E104A030	CHIP CAPACITOR	1	
C8062	F1H1E104A030	CHIP CAPACITOR	1	
C8063	F1H1E104A030	CHIP CAPACITOR	1	
C8064	F1H1E104A030	CHIP CAPACITOR	1	
C8065	F1H1E104A030	CHIP CAPACITOR	1	
C8066	F1H1E104A030	CHIP CAPACITOR	1	
C8067	F1H1E104A030	CHIP CAPACITOR	1	
C8068	F1H1E104A030	CHIP CAPACITOR	1	
C8069	ECJ1VB1E183K	CHIP CAPACITOR	1	
C8070	F1H1H103A748	CHIP CAPACITOR	1	
C8071	F1H1C104A071	CHIP CAPACITOR	1	
C8072	F1H1H330A230	CHIP CAPACITOR	1	
C8073	ECUV1H181JCV	CHIP CAPACITOR	1	
C8074	F1H1C333A059	CHIP CAPACITOR	1	
C8075	F1H0J105A002	CHIP CAPACITOR	1	
C8076	F1H0J105A002	CHIP CAPACITOR	1	
C8077	F1H0J105A002	CHIP CAPACITOR	1	
C8078	ECJ1VB1H221K	CHIP CAPACITOR	1	
C8079	ECJ1VB1H562K	CHIP CAPACITOR	1	
C8080	F1H1H152A219	CHIP CAPACITOR	1	
C8081	EEVHB0J330R	SMD ELEC CAPACITOR	1	
C8082	EEVHB0J221P	SMD ELEC CAPACITOR	1	
C8083	F1H1H120A230	CHIP CAPACITOR	1	
C8084	F1H1H120A230	CHIP CAPACITOR	1	
C8085	ECJ2YB0J225K	CHIP CAPACITOR	1	
C8086	ECJ2YB0J225K	CHIP CAPACITOR	1	
C8087	F1H1E104A030	CHIP CAPACITOR	1	
C8088	ECJ2YB0J225K	CHIP CAPACITOR	1	
C8089	ECJ2YB0J225K	CHIP CAPACITOR	1	
C8091	F1H1E104A030	CHIP CAPACITOR	1	
C8093	F1H1H103A220	CHIP CAPACITOR	1	
C8094	ECJ1VC1H100D	CHIP CAPACITOR	1	
C8096	ECJ1VC1H220J	CHIP CAPACITOR	1	
C8097	ECJ1VC1H220J	CHIP CAPACITOR	1	
C8098	F1H1E104A030	CHIP CAPACITOR	1	
C8099	F1H1E104A030	CHIP CAPACITOR	1	
C8101	F1H1E104A030	CHIP CAPACITOR	1	
C8102	F1H1E104A030	CHIP CAPACITOR	1	
C8103	F1H1E104A030	CHIP CAPACITOR	1	
C8104	F1H1E104A030	CHIP CAPACITOR	1	
C8105	F1H1E104A030	CHIP CAPACITOR	1	
C8106	F1H1E104A030	CHIP CAPACITOR	1	
C8107	F1H1E104A030	CHIP CAPACITOR	1	
C8108	F1H1E104A030	CHIP CAPACITOR	1	
C8109	F1H1E104A030	CHIP CAPACITOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C8110	F1H1E104A030	CHIP CAPACITOR	1	
C8111	F1H1E104A030	CHIP CAPACITOR	1	
C8112	F1H1E104A030	CHIP CAPACITOR	1	
C8113	F1H1E104A030	CHIP CAPACITOR	1	
C8114	F1H1E104A030	CHIP CAPACITOR	1	
C8115	F1H1E104A030	CHIP CAPACITOR	1	
C8116	F1H1E104A030	CHIP CAPACITOR	1	
C8117	F3F1A106A006	CHIP TANTAL / CAPACITOR	1	
C8201	F1H1E104A030	CHIP CAPACITOR	1	
C8301	EEVHB0J101P	SMD ELEC CAPACITOR	1	
C8307	ECEV0JA470SR	SMD ALU EL CAPACITOR	1	
C8308	F1H1H103A220	CHIP CAPACITOR	1	
C8401	ECEV1CA101WP	SMD ELEC CAPACITOR	1	
C8402	ECEV1CA101WP	SMD ELEC CAPACITOR	1	
C8403	F1H1E104A030	CHIP CAPACITOR	1	
C8404	F1H1E104A030	CHIP CAPACITOR	1	
C8405	ECJ1VC1H471J	CHIP CAPACITOR	1	
C8406	ECJ1VC1H471J	CHIP CAPACITOR	1	
C8407	F1H1H470A230	CHIP CAPACITOR	1	
C8408	F1H1H470A230	CHIP CAPACITOR	1	
C8409	ECEV1CA100SR	SMD ELEC CAPACITOR	1	
C8411	F1H1E104A030	CHIP CAPACITOR	1	
C8412	F1H1E104A030	CHIP CAPACITOR	1	
C8413	F1H1E104A030	CHIP CAPACITOR	1	
C8417	ECEV0JA331P	SMD ALU EL CAPACITOR	1	
C8418	ECEV0JA331P	SMD ALU EL CAPACITOR	1	
C8422	ECJ1VC1H100D	CHIP CAPACITOR	1	
D8002	MA2J72800L	DIODE	1	
IC8001	MN2DS0002AP1	IC	1	
IC8002	C0EBE0000070	IC	1	
IC8003	VEP03G40A	IC	1	MUST REPLACE / PCB UNIT
IC8004	C1DB00000582	IC	1	
IC8101	C0JBAH000074	IC	1	
IC8102	C0JBAH000074	IC	1	
IC8103	RFKFVP71H160	IC	1	
IC8104	C3ABPJ000017	IC	1	
IC8401	C0ABBB000109	IC	1	
IC8402	C0FBBK000035	IC	1	
K8009	ERJ3GEY0R00V	CHIP RESISTOR	1	
K8301	ERJ3GEY0R00V	CHIP RESISTOR	1	
K8302	ERJ3GEY0R00V	CHIP RESISTOR	1	
K8303	ERJ3GEY0R00V	CHIP RESISTOR	1	
K8402	ERJ3GEY0R00V	CHIP RESISTOR	1	
K8403	ERJ3GEY0R00V	CHIP RESISTOR	1	
K8404	ERJ3GEY0R00V	CHIP RESISTOR	1	
L8001	G1C100KA0019	CHIP COIL	1	
L8002	G1C220K00013	CHIP COIL	1	
L8003	G1C220K00013	CHIP COIL	1	
L8006	G1C100KA0019	CHIP COIL	1	
L8007	G1C100KA0019	CHIP COIL	1	
L8008	G1C100KA0019	CHIP COIL	1	
LB8001	J0JHC0000045	BEAD CORE	1	
LB8002	ERJ3GEYJ101Z	CHIP RESISTOR	1	
LB8003	J0JCC0000062	BEAD CORE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
LB8004	J0JCC0000062	BEAD CORE	1	
LB8005	J0JCC0000062	BEAD CORE	1	
LB8006	J0JCC0000062	BEAD CORE	1	
LB8007	J0JCC0000062	BEAD CORE	1	
LB8008	J0JCC0000062	BEAD CORE	1	
LB8009	J0JCC0000062	BEAD CORE	1	
LB8010	J0JCC0000062	BEAD CORE	1	
LB8011	J0JCC0000062	BEAD CORE	1	
LB8012	J0JCC0000062	BEAD CORE	1	
LB8013	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB8014	J0JCC0000062	BEAD CORE	1	
LB8015	J0JCC0000062	BEAD CORE	1	
LB8016	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB8017	J0JHC0000045	BEAD CORE	1	
LB8018	J0JHC0000045	BEAD CORE	1	
LB8019	J0JCC0000062	BEAD CORE	1	
LB8020	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB8021	J0JCC0000062	BEAD CORE	1	
LB8022	J0JHC0000045	BEAD CORE	1	
LB8023	J0JCC0000062	BEAD CORE	1	
LB8024	J0JCC0000062	BEAD CORE	1	
LB8025	J0JCC0000119	FERRITE CORE	1	
LB8026	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB8027	J0JCC0000119	FERRITE CORE	1	
LB8028	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB8029	J0JCC0000119	FERRITE CORE	1	
LB8030	J0JCC0000119	FERRITE CORE	1	
LB8031	J0JCC0000119	FERRITE CORE	1	
LB8032	J0JCC0000119	FERRITE CORE	1	
LB8033	J0JCC0000119	FERRITE CORE	1	
LB8034	J0JCC0000119	FERRITE CORE	1	
LB8035	J0JCC0000119	FERRITE CORE	1	
LB8036	J0JCC0000119	FERRITE CORE	1	
LB8037	J0JCC0000119	FERRITE CORE	1	
LB8038	J0JCC0000119	FERRITE CORE	1	
LB8039	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB8040	J0JCC0000166	BEAD CORE	1	
LB8041	J0JCC0000062	BEAD CORE	1	
LB8042	J0JCC0000062	BEAD CORE	1	
LB8043	J0JBC0000013	BEAD CORE	1	
LB8045	J0JBC0000013	BEAD CORE	1	
LB8046	J0JBC0000013	BEAD CORE	1	
LB8047	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB8048	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB8049	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB8050	ERJ3GEY0R00V	CHIP RESISTOR	1	
LB8051	J0JBC0000011	BEAD CORE	1	
LB8052	J0JHC0000045	BEAD CORE	1	
LB8053	J0JHC0000045	BEAD CORE	1	
LB8054	J0JBC0000070	CHIP INDUCTOR	1	
LB8055	J0JBC0000011	BEAD CORE	1	
LB8056	J0JBC0000011	BEAD CORE	1	
LB8057	J0JBC0000011	BEAD CORE	1	
LB8058	J0JBC0000011	BEAD CORE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
LB8059	J0JBC0000011	BEAD CORE	1	
LB8101	J0JCC0000166	BEAD CORE	1	
LB8102	J0JHC0000045	BEAD CORE	1	
LB8401	J0JBC0000011	BEAD CORE	1	
P8001	K1MN50A00005	50PIN CONNECTOR	1	
PS8001	K1KB14A00037	CONNECTOR	1	
PS8002	K1KB22A00025	B-B CONNECTOR	1	
Q8002	2SD1819ARL	TRANSISTOR	1	
Q8003	2SD1819ARL	TRANSISTOR	1	
Q8304	2SB1218A0L	TRANSISTOR	1	
Q8305	2SB1218A0L	TRANSISTOR	1	
Q8306	2SD1819ARL	TRANSISTOR	1	
Q8307	2SD1819ARL	TRANSISTOR	1	
Q8401	2SD1819ARL	TRANSISTOR	1	
QR8001	UNR521100L	TRANSISTOR	1	
QR8002	UNR511M00L	TRANSISTOR	1	
QR8003	UNR212100L	TRANSISTOR	1	
R8001	ERJ3GEY0R00V	CHIP RESISTOR	1	
R8002	J0JBC0000013	BEAD CORE	1	
R8003	ERJ3GEYJ222V	CHIP RESISTOR	1	
R8004	ERJ3GEYJ222V	CHIP RESISTOR	1	
R8005	ERJ3GEY0R00V	CHIP RESISTOR	1	
R8006	ERJ3GEY0R00V	CHIP RESISTOR	1	
R8007	ERJ3GEY0R00V	CHIP RESISTOR	1	
R8008	ERJ3GEY0R00V	CHIP RESISTOR	1	
R8010	ERJ3GEY0R00V	CHIP RESISTOR	1	
R8011	ERJ3GEYJ221V	CHIP RESISTOR	1	
R8012	ERJ3GEYJ221V	CHIP RESISTOR	1	
R8013	ERJ3GEYJ221V	CHIP RESISTOR	1	
R8015	ERJ3GEYJ222V	CHIP RESISTOR	1	
R8017	ERJ3GEYJ472V	CHIP RESISTOR	1	
R8018	ERJ3GEYJ472V	CHIP RESISTOR	1	
R8019	ERJ3GEYJ472V	CHIP RESISTOR	1	
R8020	ERJ3GEYJ472V	CHIP RESISTOR	1	
R8021	ERJ3GEYJ472V	CHIP RESISTOR	1	
R8022	ERJ3GEYJ103V	CHIP RESISTOR	1	
R8023	ERJ3GEYJ103V	CHIP RESISTOR	1	
R8024	ERJ3GEYJ103V	CHIP RESISTOR	1	
R8025	ERJ3GEYJ473V	CHIP RESISTOR	1	
R8026	ERJ3GEYJ101Z	CHIP RESISTOR	1	
R8027	ERJ3GEYJ221V	CHIP RESISTOR	1	
R8028	ERJ3GEYJ101Z	CHIP RESISTOR	1	
R8029	ERJ3GEYJ823V	CHIP RESISTOR	1	
R8030	ERJ3GEYJ102V	CHIP RESISTOR	1	
R8031	ERJ3GEYJ102V	CHIP RESISTOR	1	
R8032	ERJ3GEYJ331V	CHIP RESISTOR	1	
R8033	ERJ3GEYJ331V	CHIP RESISTOR	1	
R8035	ERJ3GEYJ473V	CHIP RESISTOR	1	
R8036	ERJ3GEYJ220V	CHIP RESISTOR	1	
R8037	ERJ3GEYJ220V	CHIP RESISTOR	1	
R8041	ERJ3GEYJ153V	CHIP RESISTOR	1	
R8042	ERJ3GEYJ153V	CHIP RESISTOR	1	
R8044	ERJ3GEYJ103V	CHIP RESISTOR	1	
R8045	ERJ3GEYJ752V	CHIP RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R8046	ERJ3GEYJ752V	CHIP RESISTOR	1	
R8047	ERJ3GEYJ822V	CHIP RESISTOR	1	
R8048	ERJ3GEYJ822V	CHIP RESISTOR	1	
R8049	ERJ3GEYJ102V	CHIP RESISTOR	1	
R8050	ERJ3GEYJ102V	CHIP RESISTOR	1	
R8051	ERJ3GEYJ102V	CHIP RESISTOR	1	
R8054	ERJ3GEY0R00V	CHIP RESISTOR	1	
R8055	ERJ3GEYJ330V	CHIP RESISTOR	1	
R8056	ERJ3GEYJ470V	CHIP RESISTOR	1	
R8057	ERJ3GEYF392V	RESISTOR	1	
R8058	ERJ3RBD303V	CHIP RESISTOR	1	
R8059	ERJ3GEYF153V	CHIP RESISTOR	1	
R8060	ERJ3GEYJ473V	CHIP RESISTOR	1	
R8061	ERJ3GEYJ473V	CHIP RESISTOR	1	
R8062	ERJ3RBD202V	CHIP RESISTOR	1	
R8063	ERJ3RBD132V	CHIP RESISTOR	1	
R8064	ERJ3RBD151V	CHIP RESISTOR	1	
R8065	ERJ3RBD151V	CHIP RESISTOR	1	
R8066	ERJ3RBD151V	CHIP RESISTOR	1	
R8067	ERJ3RBD151V	CHIP RESISTOR	1	
R8068	ERJ3RBD151V	CHIP RESISTOR	1	
R8070	ERJ3RBD153V	CHIP RESISTOR	1	
R8071	ERJ3GEYJ103V	CHIP RESISTOR	1	
R8072	ERJ3GEYJ683V	CHIP RESISTOR	1	
R8074	ERJ3RBD331V	CHIP RESISTOR	1	
R8075	ERJ3GEYJ103V	CHIP RESISTOR	1	
R8077	ERJ3GEYJ470V	CHIP RESISTOR	1	
R8078	ERJ3GEY0R00V	CHIP RESISTOR	1	
R8079	ERJ3GEYJ102V	CHIP RESISTOR	1	
R8088	ERJ3GEYJ103V	CHIP RESISTOR	1	
R8089	ERJ3GEYJ820V	CHIP RESISTOR	1	
R8090	ERJ3GEYJ221V	CHIP RESISTOR	1	
R8091	ERJ3GEYJ105V	CHIP RESISTOR	1	
R8092	ERJ3GEYJ154V	CHIP RESISTOR	1	
R8093	ERJ3GEY0R00V	CHIP RESISTOR	1	
R8094	ERJ3GEYJ181V	CHIP RESISTOR	1	
R8101	ERJ3GEYJ470V	CHIP RESISTOR	1	
R8103	ERJ3GEYJ681V	CHIP RESISTOR	1	
R8104	ERJ3GEYJ681V	CHIP RESISTOR	1	
R8303	ERJ3GEYJ683V	CHIP RESISTOR	1	
R8304	ERJ3RBD151V	CHIP RESISTOR	1	
R8305	ERJ3GEYJ333V	CHIP RESISTOR	1	
R8306	ERJ3RBD151V	CHIP RESISTOR	1	
R8307	ERJ3RBD151V	CHIP RESISTOR	1	
R8308	ERJ3RBD121V	CHIP RESISTOR	1	
R8309	ERJ3RBD151V	CHIP RESISTOR	1	
R8310	ERJ3RBD121V	CHIP RESISTOR	1	
R8311	ERJ3RBD121V	CHIP RESISTOR	1	
R8312	ERJ3RBD151V	CHIP RESISTOR	1	
R8313	ERJ3GEYJ153V	CHIP RESISTOR	1	
R8314	ERJ3RBD151V	CHIP RESISTOR	1	
R8316	ERJ3GEYJ331V	CHIP RESISTOR	1	
R8317	ERJ3GEYJ121V	CHIP RESISTOR	1	
R8318	ERJ3GEYJ121V	CHIP RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R8319	ERJ3GEYJ331V	CHIP RESISTOR	1	
R8320	ERJ3GEYJ393V	CHIP RESISTOR	1	
R8401	ERJ3GEYJ101Z	CHIP RESISTOR	1	
R8402	ERJ3GEYJ101Z	CHIP RESISTOR	1	
R8403	ERJ3GEYJ101Z	CHIP RESISTOR	1	
R8404	ERJ3GEYJ101Z	CHIP RESISTOR	1	
R8405	ERJ3GEYJ101Z	CHIP RESISTOR	1	
R8406	ERJ3GEYF123V	CHIP RESISTOR	1	
R8407	ERJ3GEYF123V	CHIP RESISTOR	1	
R8408	ERJ3GEYF123V	CHIP RESISTOR	1	
R8409	ERJ3GEYF123V	CHIP RESISTOR	1	
R8410	ERJ3GEYJ622V	CHIP RESISTOR	1	
R8411	ERJ3GEYJ622V	CHIP RESISTOR	1	
R8412	ERJ3GEYJ221V	CHIP RESISTOR	1	
R8413	ERJ3GEYJ101Z	CHIP RESISTOR	1	
R8414	ERJ3GEYG122V	CHIP RESISTOR	1	
R8415	ERJ3GEYG392V	CHIP RESISTOR	1	
RA8002	D1H88204A008	CHIP RESISTOR ARRAY	1	
RA8003	D1H88204A008	CHIP RESISTOR ARRAY	1	
RA8004	D1H88204A008	CHIP RESISTOR ARRAY	1	
RA8005	D1H88204A008	CHIP RESISTOR ARRAY	1	
RA8006	D1H88204A008	CHIP RESISTOR ARRAY	1	
RA8007	D1H88204A008	CHIP RESISTOR ARRAY	1	
RA8008	D1H88204A008	CHIP RESISTOR ARRAY	1	
RA8009	D1H88204A008	CHIP RESISTOR ARRAY	1	
RA8010	D1H88204A008	CHIP RESISTOR ARRAY	1	
RA8011	D1H88204A008	CHIP RESISTOR ARRAY	1	
RA8012	D1H88204A008	CHIP RESISTOR ARRAY	1	
X8001	H0J368500001	CRYSTAL	1	
■	VEP04839A	FRONT JACK PCB	1	(RTL)
C4801	F1H1H101A736	CHIP CAPACITOR	1	
C4802	F1H1H101A736	CHIP CAPACITOR	1	
C4805	F1H1E104A030	CHIP CAPACITOR	1	
IR4801	PNA4618M14VT	IR RECEIVER	1	
JK4801	K2HA303A0004	FRONT AV	1	
PP4801	K1KA10C00008	CONNECTOR 10POL	1	
R4801	ERJ3GEYJ122V	CHIP RESISTOR	1	
R4802	ERJ3GEYJ122V	CHIP RESISTOR	1	
R4803	ERJ3GEYJ152V	CHIP RESISTOR	1	
R4804	ERJ3GEYJ152V	CHIP RESISTOR	1	
R4805	ERJ3GEYJ562V	CHIP RESISTOR	1	
R4806	ERJ3GEYJ472V	CHIP RESISTOR	1	
R4807	ERJ3GEYJ122V	CHIP RESISTOR	1	
R4808	ERJ3GEYJ682V	CHIP RESISTOR	1	
R4810	ERJ3GEYJ750V	CHIP RESISTOR	1	
R4813	ERJ3GEYJ471V	CHIP RESISTOR	1	
R4814	ERJ3GEYJ471V	CHIP RESISTOR	1	
R4815	ERJ3GEYJ221V	CHIP RESISTOR	1	
R4816	ERJ3GEYJ103V	CHIP RESISTOR	1	
S4801	EVQ11L07B	SWITCH	1	
S4802	EVQ11L07B	SWITCH	1	
S4803	EVQ11L07B	SWITCH	1	
S4804	EVQ11L07B	SWITCH	1	
S4805	EVQ11L07B	SWITCH	1	

[illegible]	[illegible]	[illegible]	[illegible]	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
S4806	EVQ11L07B	SWITCH	1	
S4807	EVQ11L07B	SWITCH	1	
S4808	EVQ11L07B	SWITCH	1	
S4809	EVQ11L07B	SWITCH	1	
S4810	EVQ11L07B	SWITCH	1	
S4811	EVQ11L07B	SWITCH	1	
■	VEP06F31A	FRONT SWITCH PCB	1	
PP7501	K1KA06C00010	CONNECTOR 6POL	1	
R7520	ERJ3GEYJ122V	CHIP RESISTOR	1	
R7521	ERJ3GEYJ122V	CHIP RESISTOR	1	
R7522	ERJ3GEYJ152V	CHIP RESISTOR	1	
R7523	ERJ3GEYJ152V	CHIP RESISTOR	1	
R7524	ERJ3GEYJ562V	CHIP RESISTOR	1	
R7525	ERJ3GEYJ562V	CHIP RESISTOR	1	
R7526	ERJ3GEYJ472V	CHIP RESISTOR	1	
S7501	EVQ11L07B	SWITCH	1	
S7502	EVQ11L07B	SWITCH	1	
S7503	EVQ11L07B	SWITCH	1	
S7504	EVQ11L07B	SWITCH	1	
S7505	EVQ11L07B	SWITCH	1	
S7506	EVQ11L07B	SWITCH	1	
S7507	EVQ11L07B	SWITCH	1	
S7508	EVQ11L07B	SWITCH	1	
■	REP3406A-1N	TERMINAL PCB	1	(RTL)
C2501	EEVFC0J221P	SMD ELEC CAPACITOR	1	
C2502	ECEV1CA101WP	SMD ELEC CAPACITOR	1	
C2503	ECEV1CA220WR	SMD ELEC CAPACITOR	1	
C2504	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C2505	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C2506	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C2507	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C2508	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C2509	EEVFC1C100R	SMD ELEC CAPACITOR	1	
C2510	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C2511	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C2512	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C2513	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C5101	EEVHB1C100R	SMD ELEC CAPACITOR	1	
C5102	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C5103	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C5111	EEVHB0J470R	SMD ELEC CAPACITOR	1	
C5115	EEVHB0J470R	SMD ELEC CAPACITOR	1	
C5123	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C5151	ECJ1VF1C104Z	CHIP CAPACITOR	1	F1H1C104A072
C5152	F3K1A1060001	CHIP TANTAL / CAPACITOR	1	
D5151	MA2J72800L	DIODE	1	
FP2501	K1MN04B00036	CONNECTOR	1	
FP5101	K1MN30B00098	CONNECTOR	1	
FP5102	K1MN50B00010	50PIN CONNECTOR	1	
IC2501	C0GBG0000033	IC	1	
L5101	ELJEA100KF	PEAKING COIL	1	
LB5101	J0JHC0000045	BEAD CORE	1	
LB5105	J0JBC0000015	CHIP BEAD INDUCTANCE	1	

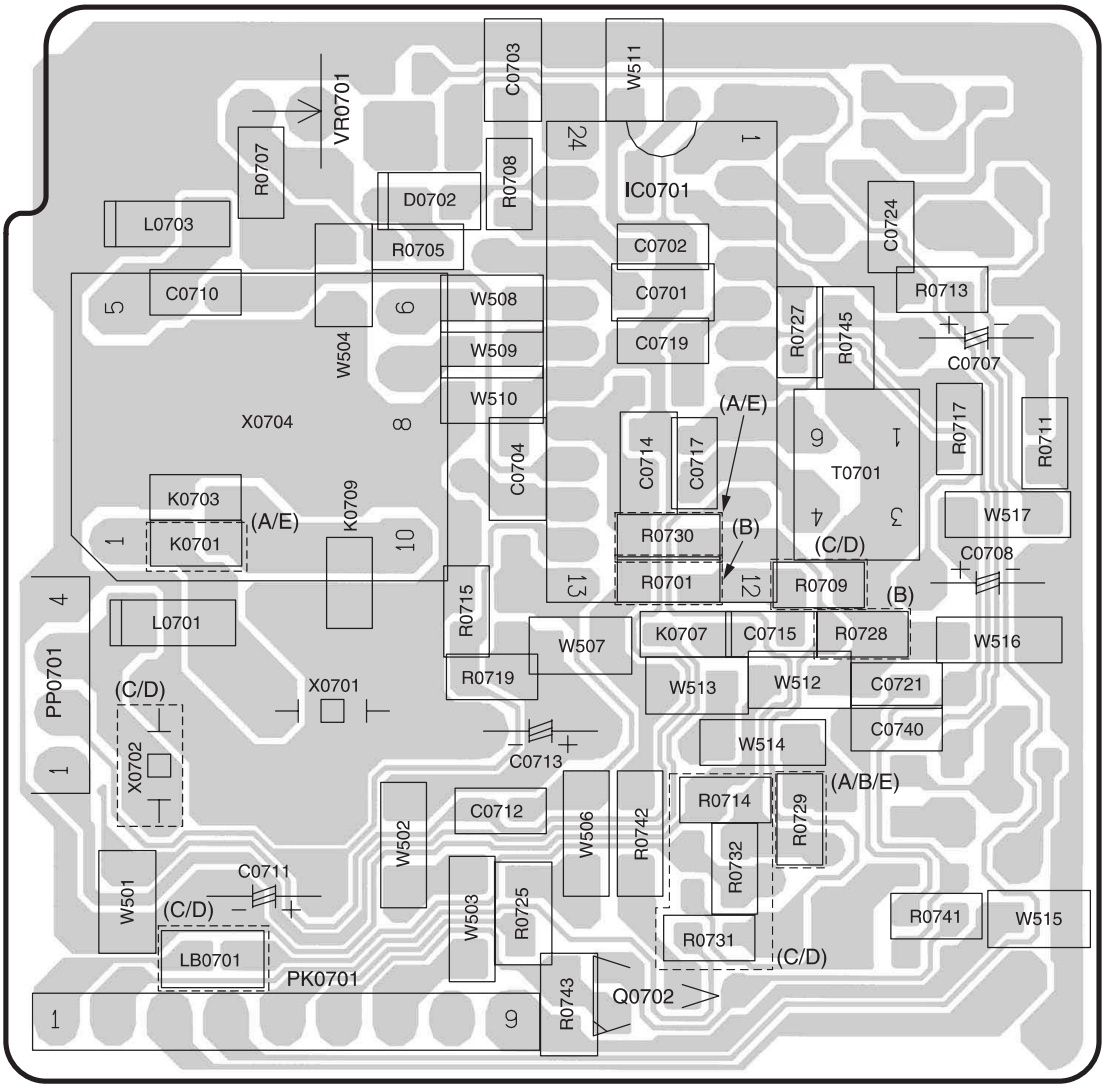
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
LB5106	J0JBC0000015	CHIP BEAD INDUCTANCE	1	
Q5111	B1BDBF000004	TRANSISTOR	1	
Q5115	B1BDBF000004	TRANSISTOR	1	
R2501	ERJ3GEYJ101V	CHIP RESISTOR	1	D0GB101JA002
R2502	ERJ3GEYJ153V	CHIP RESISTOR	1	D0GB153JA002
R2503	ERJ3GEYJ153V	CHIP RESISTOR	1	D0GB153JA002
R2504	ERJ3GEYJ823V	CHIP RESISTOR	1	D0GB823JA002
R2505	ERJ3GEYJ823V	CHIP RESISTOR	1	D0GB823JA002
R2507	ERJ6GEYJ6R8V	CHIP RESISTOR	1	D0GD6R8JA003
R5101	ERJ3GEYJ560V	CHIP RESISTOR	1	D0GB560JA002
R5102	ERJ3GEYJ560V	CHIP RESISTOR	1	D0GB560JA002
R5103	ERJ3GEYJ560V	CHIP RESISTOR	1	D0GB560JA002
R5105	ERJ12Y0R00U	CHIP RESISTOR	1	
R5107	ERJ3GEY0R00V	CHIP RESISTOR	1	
R5108	ERJ3GEY0R00V	CHIP RESISTOR	1	
R5109	ERJ3GEY0R00V	CHIP RESISTOR	1	
R5111	ERJ3GEYJ2R2V	CHIP RESISTOR	1	D0GB2R2JA002
R5112	ERJ12YJ270H	CHIP RESISTOR	1	
R5113	ERJ3GEYJ473V	CHIP RESISTOR	1	D0GB473JA002
R5114	ERJ3GEYJ223V	CHIP RESISTOR	1	D0GB223JA002
R5115	ERJ3GEYJ2R2V	CHIP RESISTOR	1	D0GB2R2JA002
R5116	ERJ12YJ270H	CHIP RESISTOR	1	
R5117	ERJ3GEYJ473V	CHIP RESISTOR	1	D0GB473JA002
R5120	ERJ3GEY0R00V	CHIP RESISTOR	1	
R5121	ERJ3GEYJ560V	CHIP RESISTOR	1	D0GB560JA002
R5122	ERJ3GEYJ560V	CHIP RESISTOR	1	D0GB560JA002
R5123	ERJ3GEYJ560V	CHIP RESISTOR	1	D0GB560JA002
R5124	ERJ3GEYJ472V	CHIP RESISTOR	1	D0GB472JA002
R5152	ERJ3GEYJ102V	CHIP RESISTOR	1	D0GB102JA002
RA2501	EXBV8V473JV	CHIP RESISTOR ARRAY	1	
RA5101	EXBV4V560JV	RESISTOR ARRAY	1	
RA5102	EXBV8V560JV	CHIP RESISTOR ARRAY	1	
RA5103	EXBV4V560JV	RESISTOR ARRAY	1	
SW2501	RSH1A048-A	LEAF SWITCH	1	
■		CYLINDER STATOR PCB	1	
		MISCELLANEOUS		
	VJS3537F009G	CONNECTOR	1	K1MN09B00039
	HW-300A-DF	HALL IC	1	B4AAB0000007

22. DIAGRAMS FOR PRINTING A4 SIZE

TV DEMODULATOR PACK PCB	
Transistor	
Q0702	A-3
Integrated Circuit	
IC0701	E-3
Adjustment	
T0701	C-4
VR0701	E-2
Connector	
PK0701	A-2
PP0701	C-1

ADDRESS INFORMATION

VEP07A23S: NV-VP25EC, NV-VP30EC
VEP07A23T: NV-VP30EB
VEP07A23U: NV-VP30EBL, NV-VP30EP

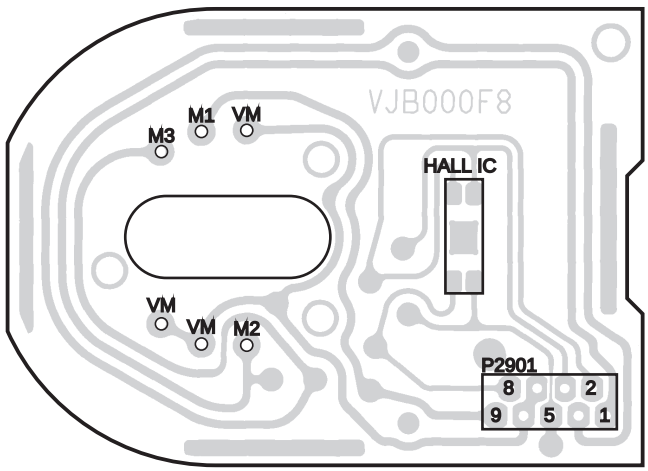


NV-VP25EC
NV-VP30EC/EB/EBL/EP
TV DEMODULATOR PACK PCB
SOLDER SIDE

CYLINDER STATOR UNIT	
Integrated Circuit	
HALL IC	C-4
Connector	
P2901	C-4

ADDRESS INFORMATION

(VEM0715)

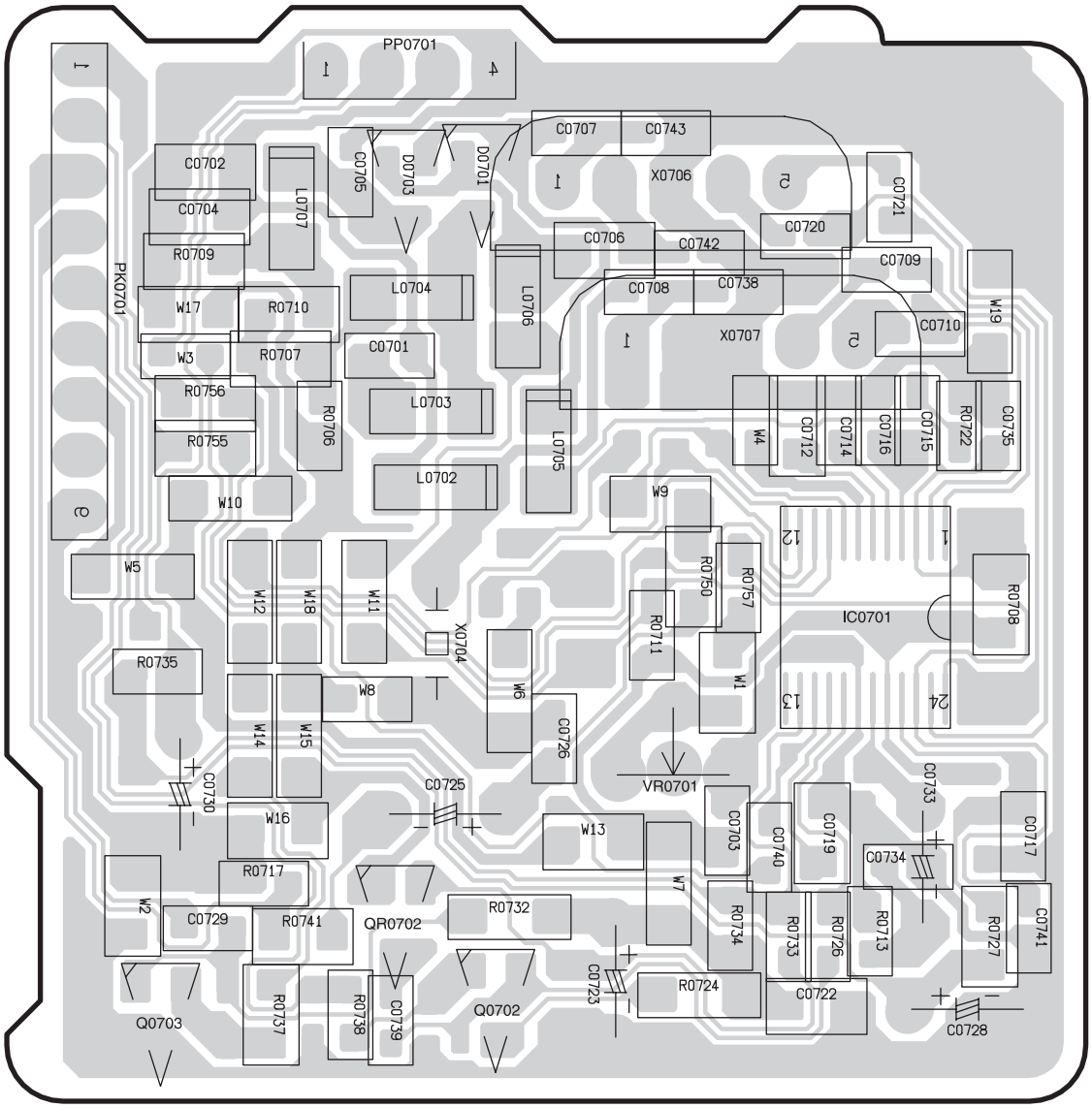


NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
CYLINDER STATOR UNIT
SOLDER SIDE

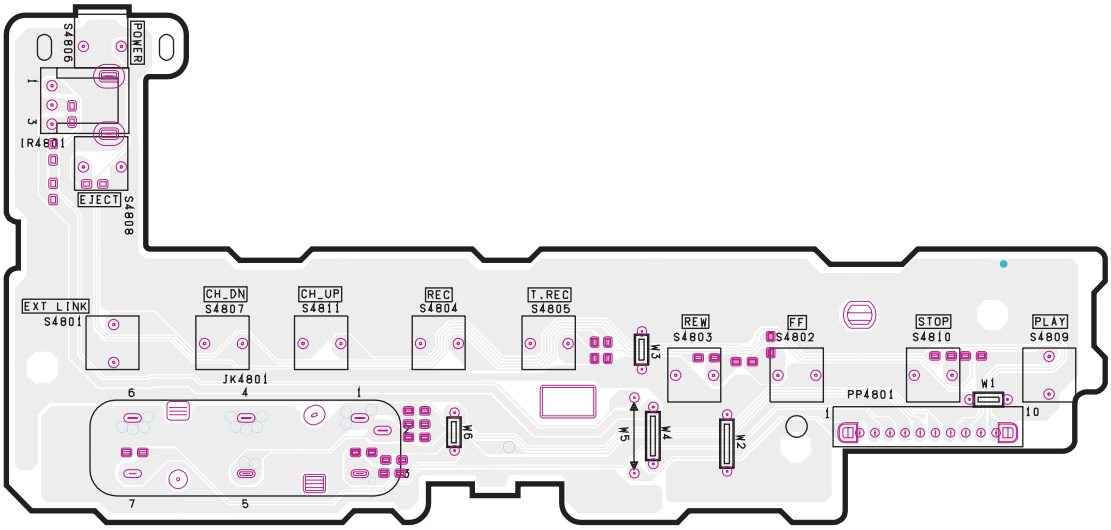
TV DEMODULATOR PACK PCB	
Transistor	
Q0702	A-3
Q0703	A-1
Transistor & Resistor	
QR0702	B-2
Integrated Circuit	
IC0701	C-4
Adjustment	
VR0701	B-3
Connector	
PK0701	D-1
PP0701	E-2

ADDRESS INFORMATION

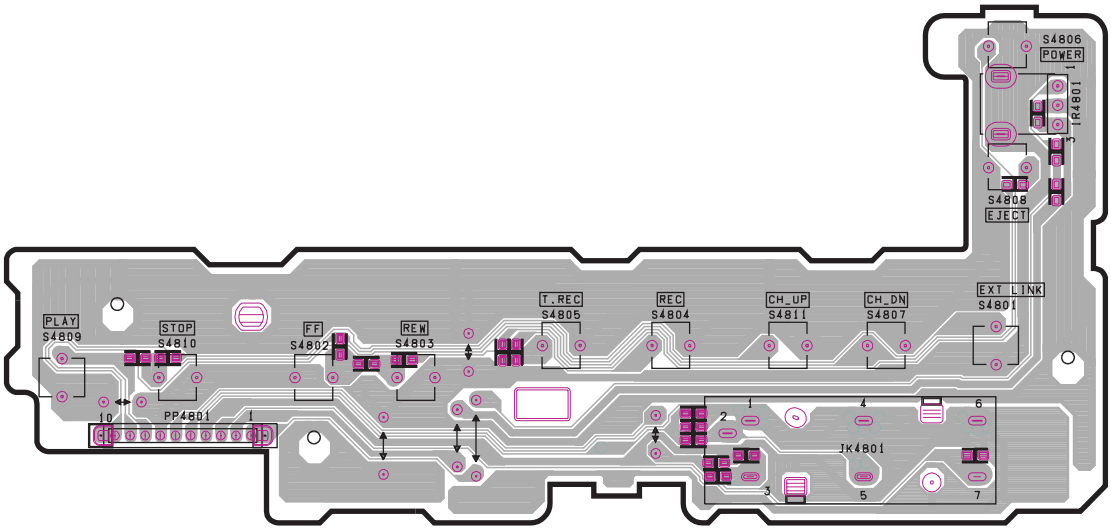
VEP07A47A: NV-VP30EF



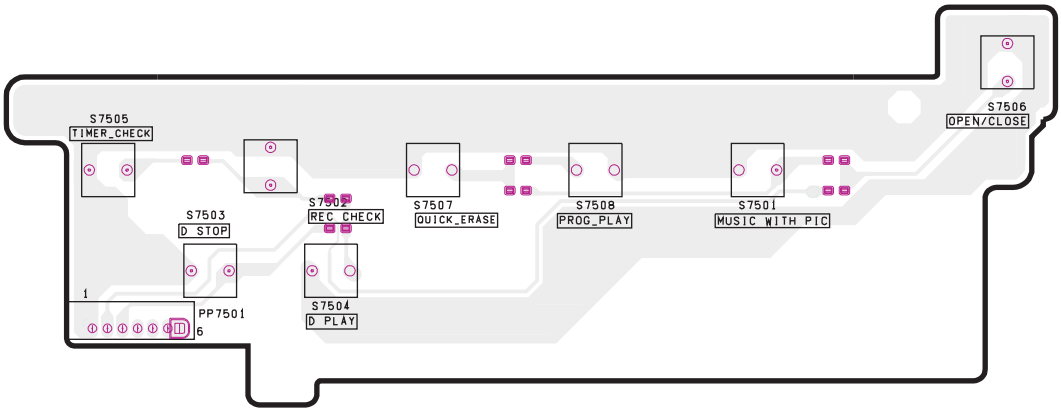
NV-VP30EF
TV DEMODULATOR PACK PCB
SOLDER SIDE



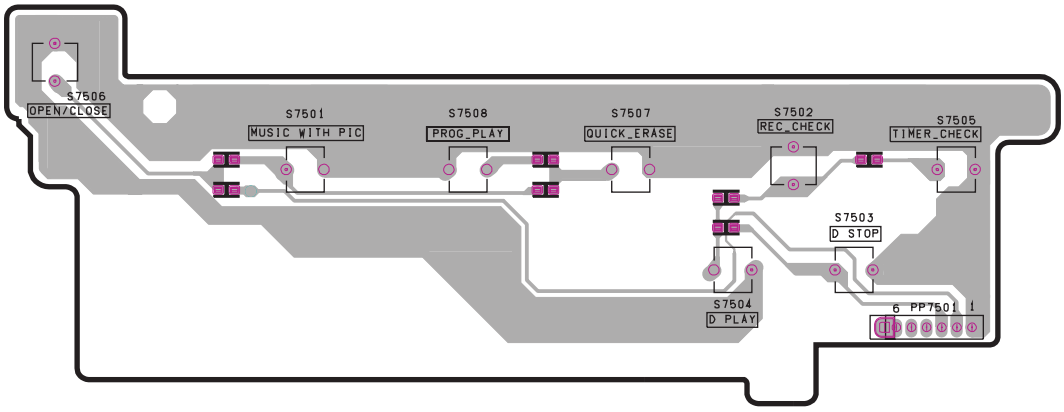
NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
FRONT JACK PCB
COMPONENT SIDE



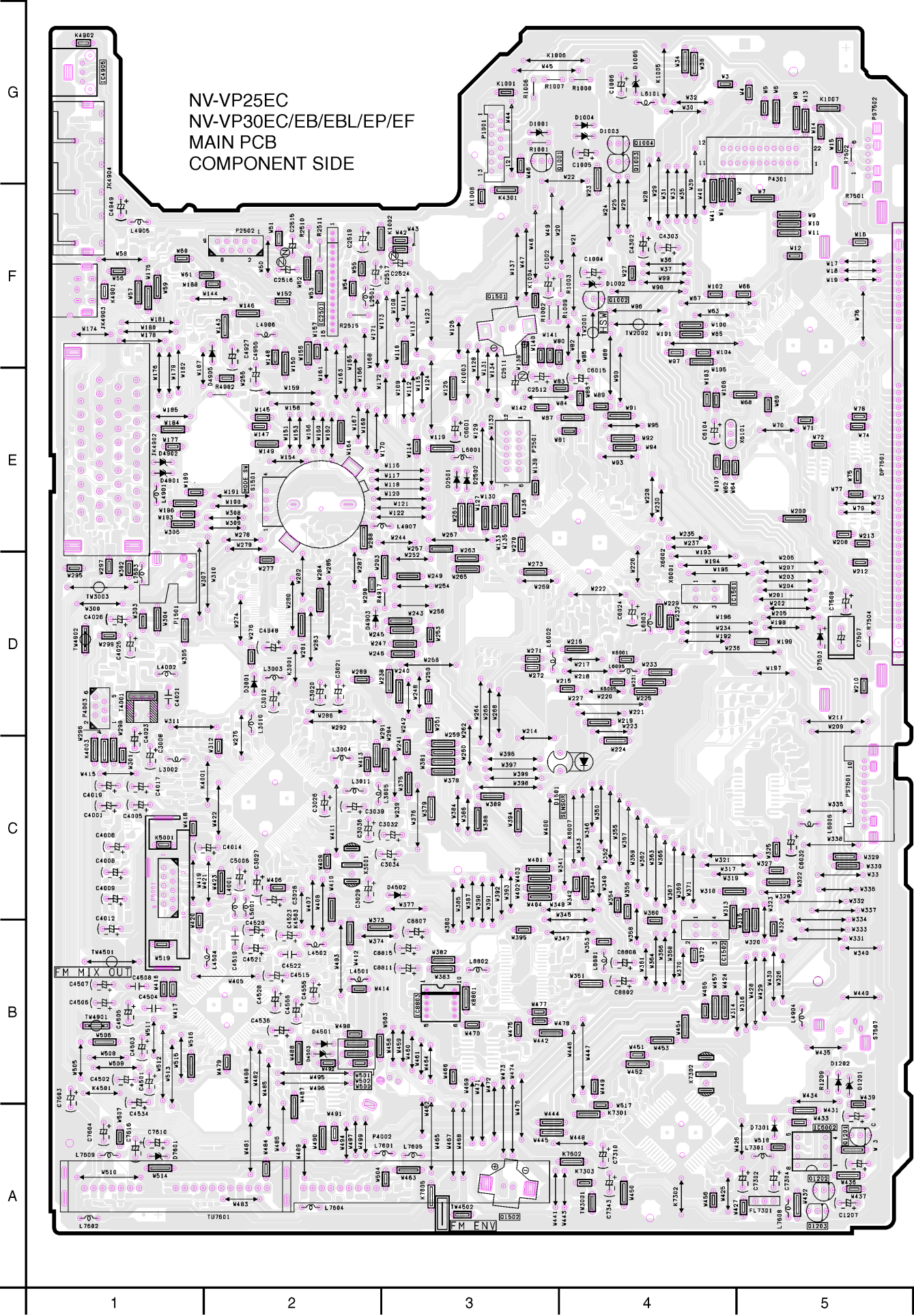
NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
FRONT JACK PCB
SOLDER SIDE



NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
FRONT SWITCH PCB
COMPONENT SIDE

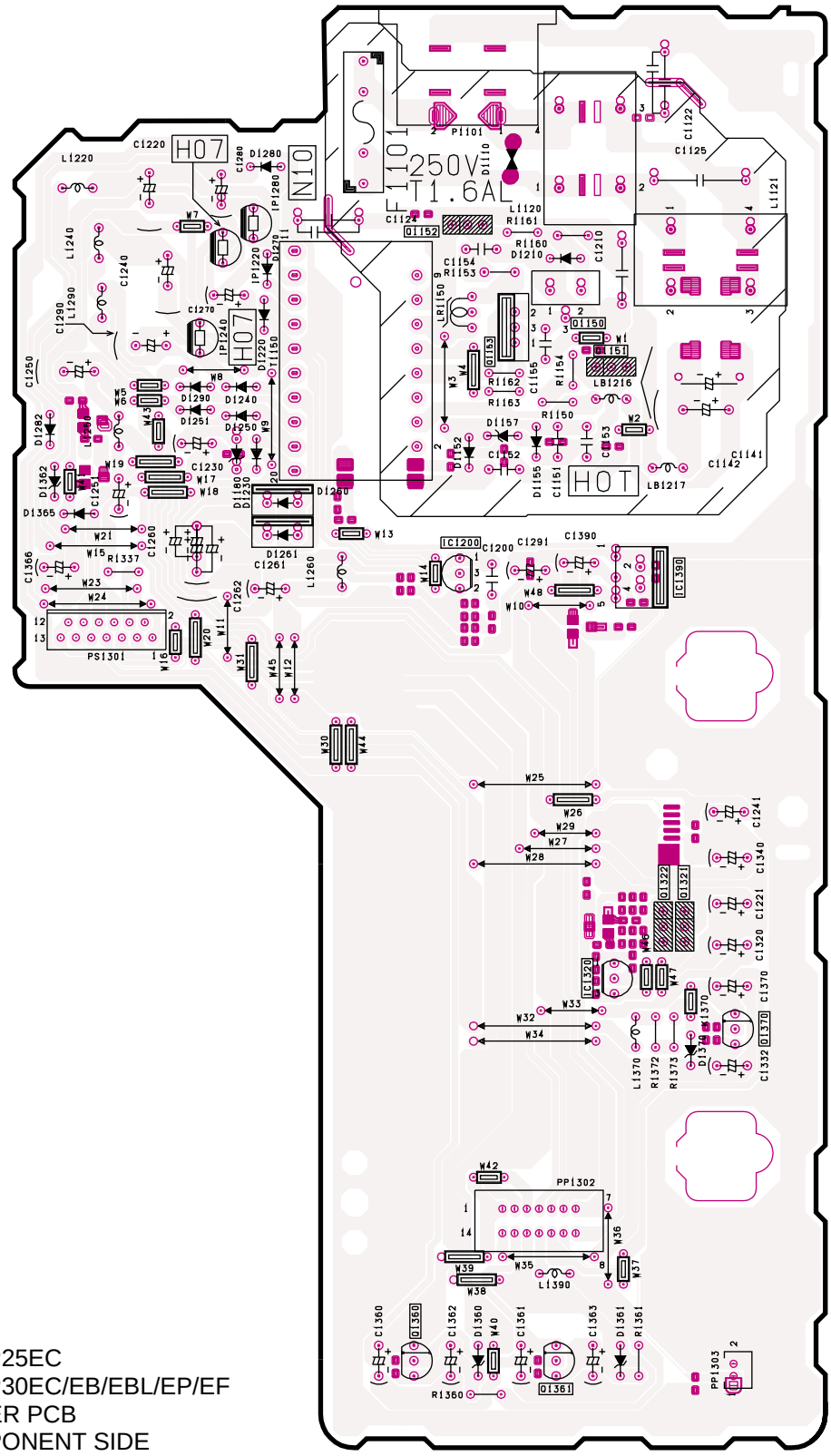


NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
FRONT SWITCH PCB
SOLDER SIDE

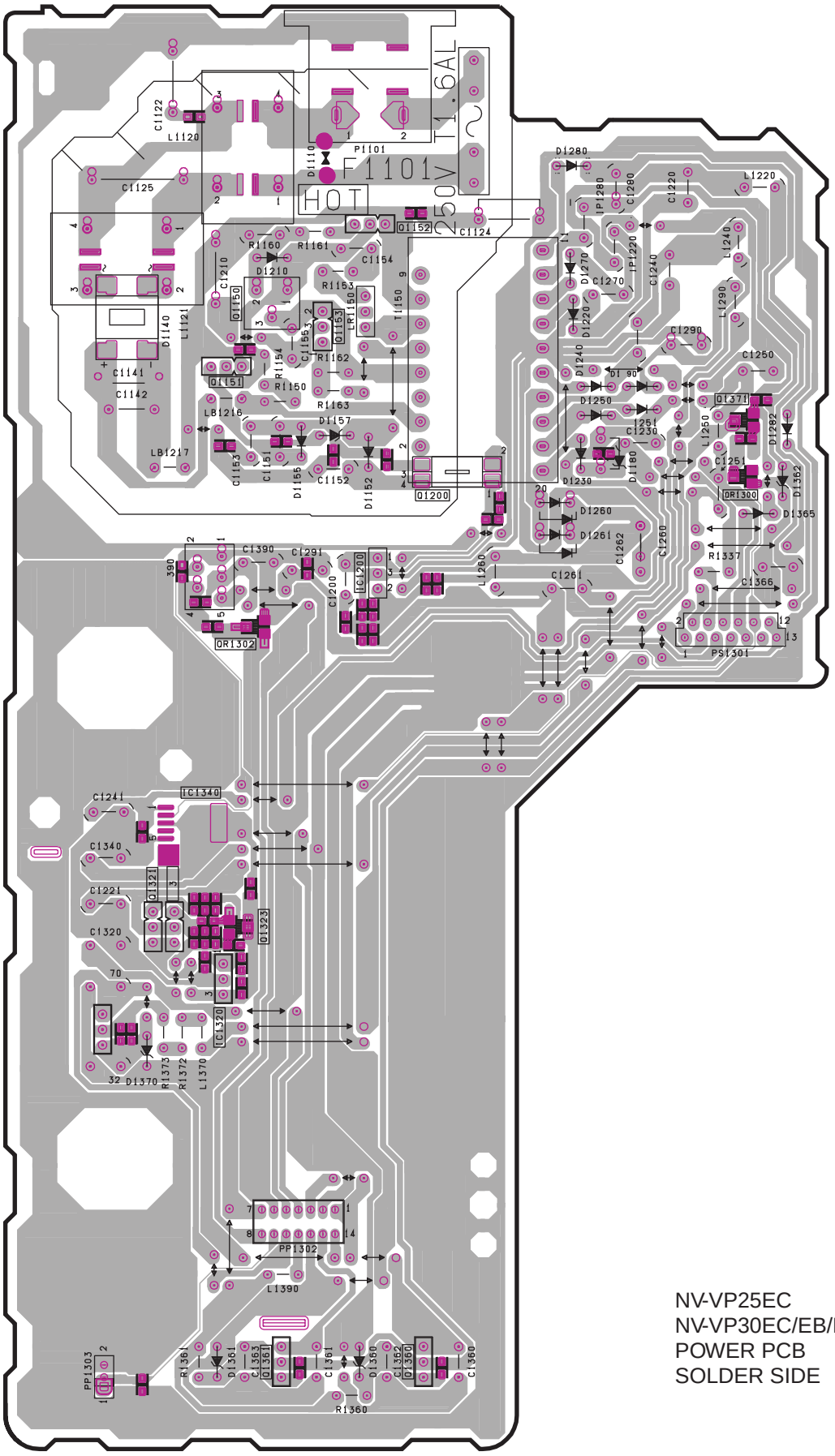

NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
MAIN PCB
COMPONENT SIDE
FM MIX OUT
FM ENV
G
F
E
D
C
B
A
1
2
3
4
5

G F E D C B A

1 2 3 4 5



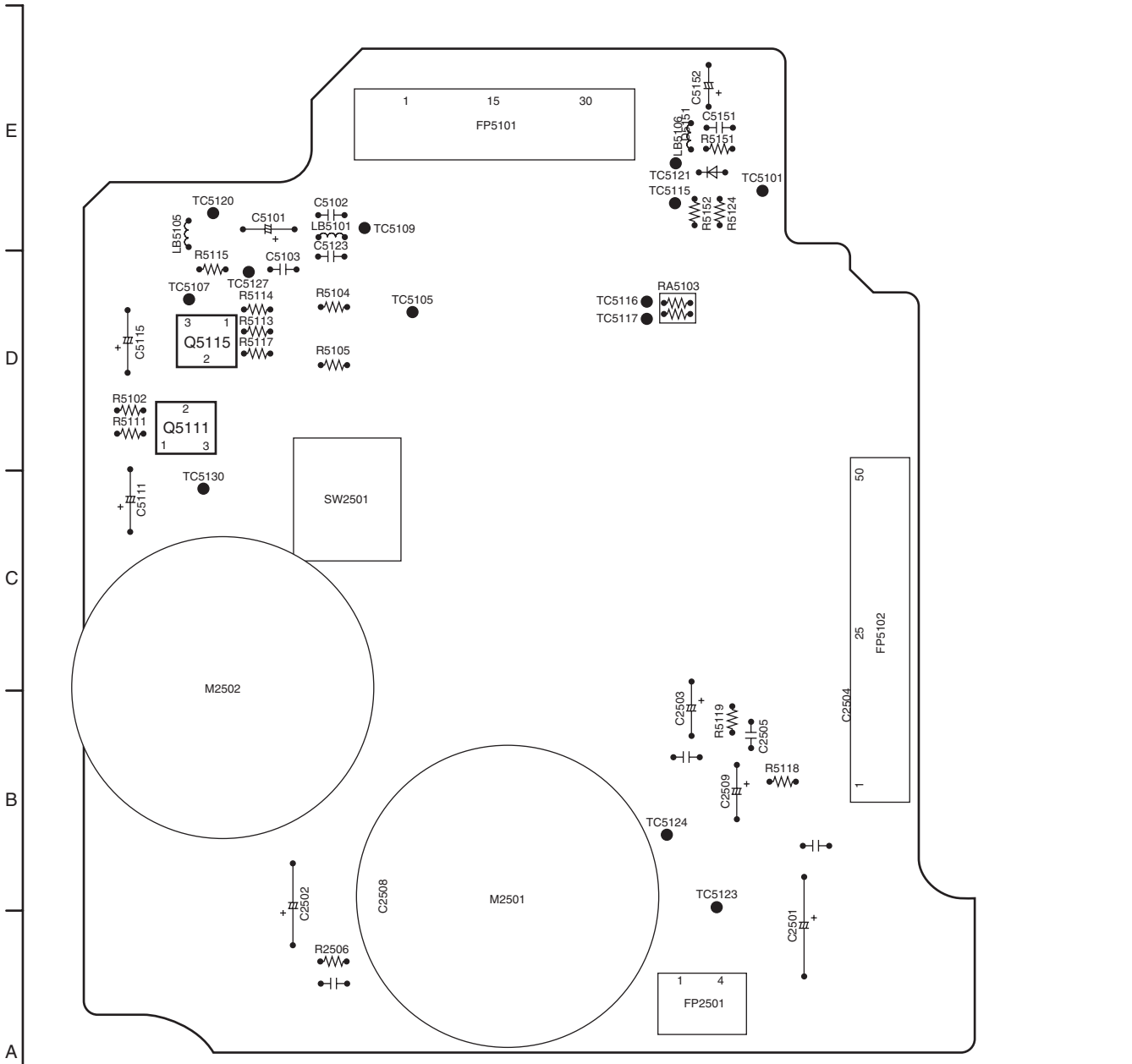
NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
POWER PCB
COMPONENT SIDE



NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
POWER PCB
SOLDER SIDE

TERMINAL PCB																	
Transistor			TC5105	D-2	C	TC5124	B-3	C	TP5115	B-6	F	TP5134	B-6	F			
Q5111	D-1	C	TC5106	D-8	F	TC5125	A-6	F	TP5116	D-5	F	TP5135	B-5	F			
Q5115	D-1	C	TC5107	D-1	C	TC5127	D-2	C	TP5117	C-5	F	TP5136	B-6	F			
Integrated Circuits			TC5108	D-8	F	TC5129	D-9	F	TP5118	D-5	F	TP5137	D-5	F			
IC2501	B-6	F	TC5109	E-2	C	TC5130	C-1	C	TP5119	D-5	F	Connectors					
Test Points			TC5110	D-7	F	TP5101	A-6	F	TP5120	D-6	F	FP2501	A-4	C			
CP5101	C-7	F	TC5111	D-7	F	TP5102	A-6	F	TP5121	D-6	F	FP5101	E-3	C			
CP5102	B-7	F	TC5112	D-7	F	TP5103	A-6	F	TP5122	C-5	F	FP5102	C-4	C			
CP5103	C-7	F	TC5113	D-7	F	TP5104	B-6	F	TP5123	C-6	F						
CP5104	D-7	F	TC5114	D-6	F	TP5105	A-6	F	TP5124	C-5	F						
CP5105	D-8	F	TC5115	E-3	C	TP5106	A-6	F	TP5125	C-6	F						
TC2522	B-7	F	TC5116	D-3	C	TP5107	A-6	F	TP5126	C-5	F						
TC2523	B-8	F	TC5117	D-3	C	TP5108	B-6	F	TP5127	C-6	F						
TC2524	B-8	F	TC5118	D-6	F	TP5109	B-6	F	TP5128	C-5	F						
TC2525	C-8	F	TC5119	D-6	F	TP5110	B-6	F	TP5129	C-6	F						
TC5101	E-4	C	TC5120	E-1	C	TP5111	B-6	F	TP5130	C-6	F						
TC5102	D-8	F	TC5121	E-3	C	TP5112	B-5	F	TP5131	C-5	F						
TC5103	D-8	F	TC5122	A-6	F	TP5113	A-6	F	TP5132	C-6	F						
TC5104	D-8	F	TC5123	B-4	C	TP5114	B-5	F	TP5133	B-5	F						

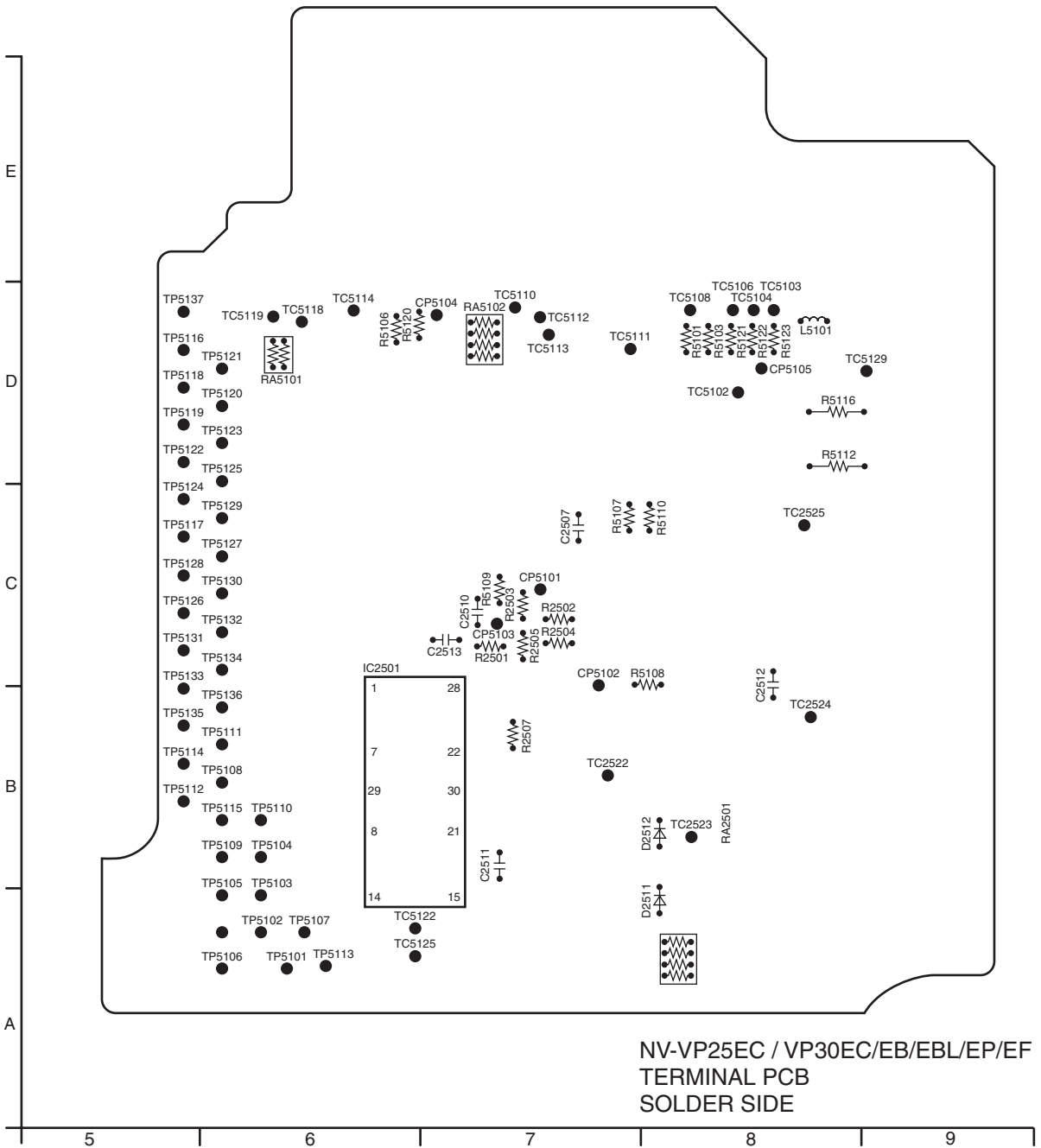
ADDRESS INFORMATION
C..COMPONENT SIDE
F..SOLDER SIDE (see next page)



NV-VP25EC / VP30EC/EB/EBL/EP/EF
TERMINAL PCB
COMPONENT SIDE

TERMINAL PCB																	
Transistor			TC5105	D-2	C	TC5124	B-3	C	TP5115	B-6	F	TP5134	B-6	F			
Q5111	D-1	C	TC5106	D-8	F	TC5125	A-6	F	TP5116	D-5	F	TP5135	B-5	F			
Q5115	D-1	C	TC5107	D-1	C	TC5127	D-2	C	TP5117	C-5	F	TP5136	B-6	F			
Integrated Circuits			TC5108	D-8	F	TC5129	D-9	F	TP5118	D-5	F	TP5137	D-5	F			
IC2501	B-6	F	TC5109	E-2	C	TC5130	C-1	C	TP5119	D-5	F	Connectors					
Test Points			TC5110	D-7	F	TP5101	A-6	F	TP5120	D-6	F	FP2501	A-4	C			
CP5101	C-7	F	TC5111	D-7	F	TP5102	A-6	F	TP5121	D-6	F	FP5101	E-3	C			
CP5102	B-7	F	TC5112	D-7	F	TP5103	A-6	F	TP5122	C-5	F	FP5102	C-4	C			
CP5103	C-7	F	TC5113	D-7	F	TP5104	B-6	F	TP5123	C-6	F						
CP5104	D-7	F	TC5114	D-6	F	TP5105	A-6	F	TP5124	C-5	F						
CP5105	D-8	F	TC5115	E-3	C	TP5106	A-6	F	TP5125	C-6	F						
TC2522	B-7	F	TC5116	D-3	C	TP5107	A-6	F	TP5126	C-5	F						
TC2523	B-8	F	TC5117	D-3	C	TP5108	B-6	F	TP5127	C-6	F						
TC2524	B-8	F	TC5118	D-6	F	TP5109	B-6	F	TP5128	C-5	F						
TC2525	C-8	F	TC5119	D-6	F	TP5110	B-6	F	TP5129	C-6	F						
TC5101	E-4	C	TC5120	E-1	C	TP5111	B-6	F	TP5130	C-6	F						
TC5102	D-8	F	TC5121	E-3	C	TP5112	B-5	F	TP5131	C-5	F						
TC5103	D-8	F	TC5122	A-6	F	TP5113	A-6	F	TP5132	C-6	F						
TC5104	D-8	F	TC5123	B-4	C	TP5114	B-5	F	TP5133	B-5	F						

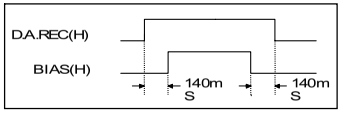
ADDRESS INFORMATION
C..COMPONENT SIDE (see previous page)
F..SOLDER SIDE



NV-VP25EC / VP30EC/EB/EBL/EP/EF
TERMINAL PCB
SOLDER SIDE

No.	NAME	PIN type and direction			Description	P-OFF	P-SAVE	P-FAIL	Reset
1	A.DEF(H)	P110/AN8	I/O	Push/Pull Out	Output signal for audio defea and decoder IC reset	Low	Low	Low	Low
2	CKILLER DET(L)	P77/AN7	I/O	Analogue Voltage Input	COLOR KILLER (Detection of COLOR KILLER active)	In	In	In	In
3	AFC S	P76/AN6	I/O	Analogue Voltage Input	S curve input from tuner	In	In	In	In
4	EP(H)	P75/AN5	I/O	Push/Pull Out	Output signal depens on tape speed (During N10H or P9H: High) (Except N10H and P9H: Low)	Low	Low	Low	Low
5	CPB	P74/AN4	I/O	Analogue Voltage Input	PB input from AV2 3.21v ~ : High 1.23v ~ 3.21v : Middle ~ 1.23v : Low	In	In	In	In
6	N/S/T2	P73/AN3	I/O	Analogue Voltage Input	Normal/Service/Test2/Test3 select 4.0v~ : NORMAL mode 2.5v~ 4.0v : SERVICE mode 1.0v~ 2.5v : TEST2 mode 0v~ 1.0v : No define (spare)	In	In	In	In
7	S-PHOTO	P72/AN2	I/O	Analogue Voltage Input	Photo sensor input from supply side (more than 2.6V: black / less than 2.4V: white)	In	In	In	In
8	T-PHOTO	P71/AN1	I/O	Analogue Voltage Input	Photo sensor input from take up side (more than 2.6V: black / less than 2.4V: white)	In	In	In	In
9	TRACKING_ENVE	P70/AN0	I/O	Analogue Voltage Input	Video envelope input for auto tracking and CVC	In	In	In	In
10	AV1_8IN	P67/AN10/ADtrg	I/O	Analogue Voltage Input	Not connect	In	In	In	In
11	CURRENT_LIMIT	P66/RTP11/DA1	I/O	Analogue Voltage Out	Current limit for capstan driver	Low	Low	Low	Low
12	F ADJUST	P65/RTP10/DA0	I/O	Analogue Voltage Out	Analogue voltage output for HEAD frequency response adjustment	Low	Low	Low	Low
13	ART.V/H/N	P64/RTP03/Vsyncmon	I/O	Push/Pull Out	Artificial V synchronization signal	Low	Low	Low	Low
14	REMOCON	P63/RTP02/GEN	I/O	Interrupt Input	Interrupt input from IR sensor	In	In	In	In
15	AVPB-H(L)	P62/EXORout1(CROT)	I/O	Push/Pull Out	Output signal for AV2-PB	High	High	Low	High
16	AVPB-M(H)	P61/EXORout0(HASW)	I/O	OD/Pull Out		Low	Low	Low	Low

setup / pin8	AVPB-H(L)	AVPBM-(H)
High	L	Hi-Z
Middle	H	Hi-Z
Low	H	L

No.	NAME	PIN type and direction			Description	P-OFF	P-SAVE	P-FAIL	Reset
17	EEP_WR	P60/EXORin(ENVS)	I/O	Push/Pull Out	Write enable for EEPROM H:READ onl y L:Write	High	High	Low	High
18	VIDEO.H.SW	P57/RTP01(HSW)	I/O	Push/Pull Out	Output signal for video HEAD switch	Low	Low	Low	Low
19	A.H.SW	P56/RTP00(AHSW)	I/O	Push/Pull Out	Output signal for FM audio HEAD switch	Low	Low	Low	Low
20	PROG ON(H)	P55/RTP25	I/O	Push/Pull Out	Permission switch signal of IIC for 21PIN connection	Low	Low	Low	Low
21	B/W(H)	P54/RTP24	I/O	Push/Pull Out	Output signal for B/W mode	Low	Low	Low	Low
22	TBC MODE	P53/RTP23	I/O	Push/Pull Out	Non connect	Low	Low	Low	Low
23	ABS_NORM(H)	P52/RTP22	I/O	Input	Input signal for FM audio enverope level detection	In	In	In	In
24	V EE(L)	P51/RTP21	I/O	H.SW Sync. Out	Output signal for switch between EE and VV	Low	Low	Low	Low
25	D.FM.REC(H)	P50/RTP20	I/O	Push/Pull Out	Control signal for FM audio recording current	Low	Low	Low	Low
26	D.A.REC(H)	P47	I/O	Push/Pull Out	Control signal for normal audio recording current	Low	Low	Low	Low
27	BIAS(H)	P46	I/O	Push/Pull Out	Control signal for FM audio recording current 	Low	Low	Low	Low
28	FM.MUTE(H)	P45	I/O	Push/Pull Out	Output signal for audio mute control	High	High	Low	High
29	SW2	P44	I/O	Push/Pull Out	Broadcasting system output terminal for picture circuit control.	Not fix	Low	Low	Low
30	S-VHS DET(H)	P43	I/O	Input	Detection between SVHS and (H)	In	In	In	In
31	POS.SW3	P42	I/O	Pull up Input	Input signal for mecha position	In	In	In	In
32	POS.SW2	P41	I/O	Input	Input signal for mecha position	In	In	In	In
33	POS.SW1	P40	I/O	Pull up Input	Input signal for mecha position	In	In	In	In
34	RESET(L)	RESET	I	Input	Microprozessor reset	In	In	In	In
35	32KHz IN	P31/Xcin	I	Input	Sub oscillator input	---	---	---	---
36	32KHz OUT	P30/Xcout	O	Out	Sub oscillator output	---	---	---	---
37	+5V(D)	Vcc	I	Input		---	---	---	---
38	12MHz.IN	Xin	I	Input	Main oscillator input	---	---	---	---
39	12MHz.OUT	Xou	O	Out	Main oscillator output	---	---	---	---
40	GND(D)	Vss	I	Input		---	---	---	---
41	VHS PON (H)	P22/OSCin3	I/O	Push/Pull Out	Control signal for power circuit	Low	Low	Low	Low
42	FIP ON(L)	P21/OSCout3	I/O	Push/Pull Out	Not connect	Low	High	Low	Low
43	12M.START(H)	CLKSEL	I		Start clock selection	---	---	---	---
44	LC.OSC IN	P20/OSCin2	I/O	Input	Not connect	---	---	---	---
45	LC.OSC OUT	P17/OSCout2	I/O	Out	Not connect	---	---	---	---
46	GND	NUB				---	---	---	---
47	4FC.LPF	P16/LP	I/O	analogue		---	---	---	---
48	OSD.FSC IN	P15/FSCin	I/O	analogue		---	---	---	---
49	GND(OSD)	OSDGND	I	Input		---	---	---	---
50	CVIN	P14/Cvin	I	analogue	Composit video signal input	---	---	---	---
51	LECHA	P13/LECHA	I	analogue	Composit video signal white level input	---	---	---	---
52	CVOUT	P12/Cvout	I/O	analogue	CG Video output	---	---	---	---

No.	NAME	PIN type and direction			Description	P-OFF	P-SAVE	P-FAIL	Reset
53	5V(OSD)	OSDVCC	I	Input		---	---	---	---
54	HLF	P11/HLF	I/O	analogue	LPF connection terminal for slicer	---	---	---	---
55	PB60HZ	P10/VHOLD	I/O	Push/Pull Out	Audio mute signal only for RF convertor	High	High	Low	High
56	CVIN(EDS)	P07/CVIN(EDS)	I	Input	Composit video signal input for slicer	In	In	In	In
57	GND	NUA	I			---	---	---	---
58	SECAM/PAL(SYS2)	P06/Hsync/Csyncin(Din)	I/O	Push/Pull Out	Broadcasting system output terminal for picture circuit control.	Low	Low	Low	Low
59	SECAM.V.IN	P05/Vsync/SECAM MIX	I	analogue	Chroma input for Secam superimposition	---	---	---	---
60	OSD PULSE	P04/OUT1	I/O	Push/Pull Out	Not connect	Low	Low	Low	Low
61	SLEEP(L)	P03/OUT2	I/O	Push/Pull Out	Not connect	High	Low	Low	High
62	UNLOADING(H)	P02/B	I/O	Push/Pull Out	Control signal for Loading motor forward	Low	Low	Low	Low
63	LOADING(H)	P01/G	I/O	Push/Pull Out	Control signal for Loading motor reverse	Low	Low	Low	Low
64	FLD CS	P00/R	I/O	Push/Pull Out	FLD	Not fix	Not fix	Low	Low
65	MESECAM DET (H)	P107/Sout1	I/O	Analogue Voltage Input	MESECAM/NORMAL Detection between MESECAM and NORMAL	In	In	In	In
66	LP(H)	P106/Sin1	I/O	Out	Not connect	Low	Low	Low	Low
67	EEPROM CLK	P105/Sclk1	I/O	OD/Pull Out	Non connect	Low	Low	Low	Low
68	FLD DATA OUT	P104/Sout0 /CPFGmon	I/O	OD/Pull Out	FIP Serial data output signal for FIP driver	Not fix	Not fix	Low	Low
69	FLD DATA IN	P103/Sin0 /DRPFmon	I/O	Input	FIP Serial data input signal for FIP driver	Not fix	Not fix	In	In
70	FLD CLK	P102/Sclk0B /DRFGmon	I/O	OD/Pull Out	FIP Serial clock signal for FIP driver	Not fix	Not fix	Low	Low
71	IIC CLK	P101/Sclk0A /PBCTLmon/SCL	I/O	OD/Pull Out	IIC clock for all IIC devices	Not fix	Not fix	Low	Low
72	IIC DATA	P100/T1/SDA	I/O	I/O	IIC data for all IIC devices	Notfix	Not fix	Low	Low
73	125Hz	P97/T5	I/O	Push/Pull Out	Not connect	Low	Low	Low	Low
74	CAP.R/F	P96/T4	I/O	Push/Pull Out	Control signal for capstan motor diriction	Low	Low	Low	Low
75	HALF_WAVE(H)	P95/PWM2	I/O	OD/Pull Out	Control signal for switching capstan motor mode FAST and SLOW	In	In	In	In
76	CAP.ET	P94/PWM1	I/O	PWM Out	Torque control signal for capstan motor	0V	0V	Low	0V
77	CYL.ET	P93/PWM0	I/O	PWM Out	Torque control signal for cylinder motor	4.213V	4.213V	Low	4.213V
78	P FAIL	P92/INT0	I/O	Interrupt Input	Interrupt input signal for power fail detection	In	In	In	In
79	S.REEL.PULSE	P91/RLS	I/O	Input	Input signal from supply reel sensor	In	In	In	In
80	T.REEL.PULSE	P90/RLT	I/O	Input	Input signal from take up reel sensor	In	In	In	In
81	S TAB(L)	P87	I	Input	Input signal from frase prevention tab exist: Low no exist:High	In	In	In	In
82	POWER_KEY	P86	I/O	Pull up Input	Input signal from power button on the body Switch between ON and off, when down edge is detected.	In	In	In	In
83	CNR OFF(H)	P85	I/O	Push/Pull Out	CNR control for AV1CHIP	Low	Low	Low	Low
84	SECAM_ID(L)	P84/INT2	I/O	Input	Detection of SECAM mode	In	In	In	In
85	DAVN	P83/INT1	I/O	Input	DAVN signal from Slicer	In	In	In	In
86	FG.AMP.OUT	P82/CPFGAMPout	I/O	analogue	Output from internal FG Amplifier	---	---	---	---
87	FG.AMP.IN	CPFGAMPin	I	analogue	Input for internal FG Amplifier	---	---	---	---
88	GND(A)	AMPVss	I	Input		---	---	---	---

No.	NAME	PIN type and direction			Description	P-OFF	P-SAVE	P-FAIL	Reset
89	AV3_S_IN(L)	P81/DRFGin	I/O	Input	Detection of conposite or conponent for AV3 VIDEO INPUT	In	In	In	In
90	PFG	DRPGin/DRPFGin	I	analogue		---	---	---	---
91	OREF	AMPVrefout	O	Analogue Output	Output from internal reference voltage (2.5V)	---	---	---	---
92	IREF	AMPVrefin	I	Input	Input for internal reference voltage	---	---	---	---
93	----------	----------	----	----	Not connect	-----	-----	-----	-----
94	CTL.HEAD(-)	CTL-	I/O	analogue	Input signal from CTL HEAD(+)	---	---	---	---
95	CTL.HEAD(+)	CTL+	I/O	analogue	Input signal from CTL HEAD(-)	---	---	---	---
96	CTL.AMP.REF	AMPC	I	analogue	Input for internal CTL amplifier reference voltage	---	---	---	---
97	PB.CTL.OUT	CTLAMPout	I/O	analogue	Output from internal CLT amplifier	---	---	---	---
98	+5V(A)	AMPVcc	I	Input		---	---	---	---
99	+5V(AD)	AVcc	I	Input		---	---	---	---
100	EX.FF/REW(L)	P111/AN9	I/O	OD/Pull Out	FF/REW Filter switch signal for PB-CTL	Low	Low	Low	Low

Ref.no.	IC 8003																			
Mode	1	2	3	4	5	6	7	8												
Stop	4,4	4,5	4,4	4,4	3,3	3,3	0	3,3												
Play	5,3	0	0	0	3,3	3,3	0	3,3												

Ref.no.	IC 8103																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	1	1,3	0,5	0,3	0,7	0,7	1,5	0,7	1,2	0	3,3	3,3	0	3,3	0,3	0,1	0,2	0,6	1,5	1
Play	1	2	1,1	1	1,7	1,5	1,7	1,4	0	0,3	3,3	3,3	0,8	3,3	0,6	0	0	1,1	1,7	1,4
Ref.no.																				
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Stop	0,8	2,1	1,6	1,4	2,8	2,5	0	2,8	2,5	0,4	0,6	0	0,2	0,4	0,2	0	3,3	0,6	0,2	0,3
Play	1,5	1,6	1,7	1,6	1,9	3,3	0	3,3	3,3	0	3,3	0	3,3	0	3,3	0	3,3	0	0	3,3
Ref.no.																				
Mode	41	42	43	44	45	46	47	48												
Stop	0	0,2	0,6	0,2	0	0	3,3	0,7												
Play	0	3,3	0	3,3	0	0	3,3	0												

Ref.no.	IC 8101																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	0	0	0,6	0	0,2	0	0,4	0	0,4	0	2,5	0,7	1,5	0,7	0,6	0,3	0,5	1,4	1,1	3,3
Play	0	1,3	1,8	1,1	0,9	1,7	1,4	1,4	1,1	0	1,7	1,5	1,7	1,5	1,7	1	1	1,9	1,1	3,3

Ref.no.	IC 8102																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	0	0,7	1,5	1	0,8	2	1,6	1,3	2,7	0	2,6	2,8	1,5	1,7	2,1	0,8	1	1,5	0,7	3,3
Play	0	1,3	1,6	1,3	1,4	1,7	1,7	1,4	1,8	0	1,6	1,9	1,6	1,7	1,6	1,6	1,3	1,8	1,2	3,3

Ref.no.	IC 8401																			
Mode	1	2	3	4	5	6	7	8												
Stop	2,7	2,6	2,6	-9	2,6	2,6	2,6	8,8												
Play	2,7	2,6	2,6	-9	2,6	2,6	2,6	8,8												

Ref.no.	IC 8402																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
Stop	1,6	0	1,6	0	3,3	5,2	2,6	2,6	0	2,6	0	0	3,3	2,8	3,3	0,9				
Play	1,6	0,8	1,6	0	3,3	5,2	2,6	2,6	0	2,6	3,3	0	3,3	2,8	3,3	0,8				

Ref.no.	IC 8004																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
Stop	3,3	0	1,6	1,3	3,3	0	1,5	1,3	1,5	1,3	0	3,3	1,6	3,3	0,9	3,3				
Play	3,3	0	1,6	1,3	3,3	0	1,5	1,4	1,5	1,3	0	3,3	1,6	3,3	0,9	3,3				

Ref.no.	IC 8104																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	3,3	2,6	3,3	2,5	2,7	0	2,7	3	3,3	2,6	2,4	0	2,2	0	3,3	2	3,1	3	3,1	2,6
Play	3,3	2,3	3,3	2,5	2,5	0	2,5	2,2	3,3	2	2	0	2,8	0	3,3	1,7	3,1	2,9	3,1	2,5
Ref.no.																				
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Stop	0	1,5	1,6	0	0,1	0,1	0,3	2	3,3	0	2,6	0	2,5	2,7	3,3	2,7	3	0	2,6	2,4
Play	0	1,5	1,6	0	0,2	0,3	0,6	1,8	3,3	0	2,4	0	2,4	2,6	3,3	2,5	2,5	0	2	2
Ref.no.																				
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Stop	3,3	2,2	3,3	0	2,5	0	2,5	2,6	0	2,5	2,7	0	2,2	2	3,3	2,6	0	0	2	1,6
Play	3,3	3	3,3	0	2,5	0	2,5	2,5	3,3	2,3	2,9	0	2,8	2,6	3,3	2,3	0	0	1,7	1,5
Ref.no.																				
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Stop	1,5	1,6	1,5	0	0	0	3,3	1,5	0	0	2	0	0	2,5	3,3	2,5	2,6	0	2,5	2,7
Play	1,6	1,8	1,5	0,2	0	0	3,3	1,5	0	0,1	1,7	0	0	2,4	3,3	2,5	2,3	0	2,1	2,7
Ref.no.																				
Mode	81	82	83	84	85	86														
Stop	3,3	2,2	2	0	2,6	0														
Play	3,3	3,3	2,6	0	2,2	0														

Ref.no.	IC 6101																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	2	2,8	2,8	1	2,7	2,8	3,1	3,1	1,4	1,4	-0,1	-0,1	3,1	-0,1	-0,1	3,1	3,1	3,1	3,1	3,1
Play	2	2,8	2,8	1	2,7	2,8	3,1	3,1	1,4	1,5	0	0	0,31	0	0	3,1	3,1	3,1	3,1	3,1
Ref.no.																				
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Stop	1,3	-0,1	-0,1	3,1	-0,1	3,1	-0,1	1,5	-0,1	-0,1	3,1	3,1	3,1	3,1	1,5	3,1	3,1	3,1	-0,1	-0,1
Play	1,3	0	0	3,1	0	3,1	0	1,5	0	0	3,1	3,1	3	3,1	1,5	3	3,1	3,1	0	0
Ref.no.																				
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Stop	-0,1	2,1	-0,1	1,5	-0,1	-0,1	3	0	0	3,1	-27,3	-27,3	-27,3	-27,3	-27,1	-27,2	-27,1	-27,1	-27,1	-27,1
Play	0	2,2	0	1,5	0	0	3	-0,2	-0,2	3,1	-27,7	-27,7	-27,7	-27,6	-27,4	-27,5	-27,4	-27,4	-27,5	-27,4
Ref.no.																				
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Stop	-30,1	-30,1	-30,1	-30,1	-30,1	-27	-27	-26,9	-17,5	-20,7	-26,9	-26,9	-30,3	-27,2	-30,3	-30,3	-27,2	-24	-14,7	-20,9
Play	-30,5	-30,5	-30,5	-30,5	-30,5	-27,3	-27,3	-27,2	-21	-21	-27,3	-30,5	-27,5	-27,5	-30,6	-30,6	-1,9	-0,8	-24,4	-16,7
Ref.no.																				
Mode	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Stop	-21	-24,1	-20,9	-24,1	-20,9	-24,1	-24	-17,8	-30,3	-30,3	-27,1	-27,2	-24	-27,2	-9,6	-15	3,1	-0,3	3,1	-30,4
Play	-21,3	-21,3	-21,2	-18	-21	-18	-21,3	-14,8	-27,5	-27,5	-24,3	-27,5	-24,3	-27,3	-12,1	-12,1	3,1	-0,6	3,1	-30,8

Ref.no.	IC 6003																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	-0,1	0	0	2,8	2,7	-0,1	0,1	0	5	-0,1	-0,1	4,9	0	4,8	4,9	1,4	1	0	5	5
Play	-0,1	-0,1	0	2,8	2,7	-0,1	0,3	0	5	2,4	-0,1	2,6	0	2,6	2,6	1,4	1,2	0	5	5

Ref.no.	IC 6001																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	4,6	0	2,4	-0,1	0	5	5	4,8	3	-0,1	0	-0,1	-0,1	4,3	-0,1	-0,1	4,6	-0,1	-0,1	-0,1
Play	4,6	0	2,4	-0,1	-0,1	5	5	4,8	3,1	-0,1	0	0,7	-0,1	4,3	-0,1	-0,1	4,6	2,3	2,3	-0,1
Ref.no.																				

Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Stop	4,6	-0,1	4,2	-0,1	-0,1	-0,1	-0,1	4,5	-0,1	0	-0,1	4,6	4,6	4,7	1,3	1,4	4,7	--	2,3	-0,1
Play	-0,1	-0,1	4,2	4,7	-0,1	-0,1	-0,1	-0,1	-0,1	0	4,7	-0,1	-0,1	4,7	1,4	1,4	4,7	--	2,3	-0,1
Ref.no.																				
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Stop	4,6	-0,1	4,7	-0,1	-0,1	-0,1	1,6	2	-0,1	0,8	2,5	1,7	5	2,1	-0,1	1,1	-0,1	4,6	-0,1	-0,1
Play	4,6	-0,1	4,7	-0,1	-0,1	-0,1	1,6	2	-0,1	1,7	2,5	1,7	5	2,1	-0,1	0	-0,1	4,6	-0,1	-0,1
Ref.no.																				
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Stop	-0,1	-0,1	-0,1	3,1	0	-0,1	-0,1	2,8	3,2	2,8	2,6	2,4	-0,1	-0,1	-0,1	-0,1	2,4	5	0	5
Play	-0,1	-0,1	-0,1	3,1	0	-0,1	-0,1	2,8	3,1	2,8	2,5	2,5	-0,1	-0,1	0,4	2,3	2,4	5	5	5
Ref.no.																				
Mode	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Stop	4,6	-0,1	-0,1	-0,1	5	2,5	2,5	-0,1	1,1	1	2,5	2,5	1,1	2,4	2,4	2,4	2,4	5	5	-0,1
Play	4,6	-0,1	-0,1	-0,1	5	2,5	2,5	-0,1	0,5	1	2,5	2,5	0,5	2,4	2,4	2,5	2,5	5	5	-0,1

Ref.no.	IC 3001																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	0	0,1	0,1	5	2,1	2,6	2,8	2	2	1,9	2,1	2,5	0	1,4	2,8	-0,1	2,8	1,4	2,8	0
Play	0	0	0	5	2,1	2,5	2,8	1,3	1,3	1,9	0	0,6	0	2,3	2,8	0,8	2,8	1,9	2,8	0
Ref.no.																				
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Stop	2,8	5	2,3	1,2	2,1	3	1,4	-0,1	1,5	2,2	0,2	2,3	2,1	2,7	3	2,4	3	2,1	1,5	2,1
Play	2,8	4,9	2,3	1,1	2,1	2,8	1,3	-0,1	2,4	2,9	0,3	2,3	2,1	2,5	3	2,3	3	2,2	1,5	2,1
Ref.no.																				
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Stop	2,5	2	2,1	0	3,1	3,1	5	0,1	3,4	5	2,1	5	2,6	0	2	0	2,2	2	4,9	4,9
Play	2,7	2	2,1	0	3,1	3,1	5	0,1	3,1	5	2	5	2,6	0	2	0	2,2	2,3	4,9	4,9
Ref.no.																				
Mode	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Stop	0	2,2	2,2	2	2,2	2	1,3	2,4	2	1	2,2	0,1	2,8	2,7	2,8	2,2	2,8	0	4,4	2,3
Play	4	2,2	2,2	2,1	2,2	2,1	1,2	1,2	2	1	2,2	0,2	2,8	2,7	2,8	2,2	2,8	0	-0,1	2,5
Ref.no.																				
Mode	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Stop	4,6	0	3	4,9	2,2	2,2	2,2	0	2,2	2,2	2,2	5	0	2,6	2,5	2,5	0	2,3	0	2,6
Play	4,7	0	1,3	4,9	2,2	2,2	2,2	0	2,2	2,2	2,2	5	0,4	2,6	2,5	2,5	0	2,5	0	2,5

Ref.no.	IC 4501																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	2,4	0	2,4	0	0	2,5	2,1	0	0	0	0	2,1	0	0	0	2,5	0,5	2,5	2,5	2
Play	2,4	0	2,4	0	0	2,5	2,1	0	0	0	0	2,1	0	0	0	2,5	0,8	2,5	2,5	0
Ref.no.																				
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Stop	2	2	0	2,1	5	2,1	-0,1	4,2	1,8	1,7	0	2,5	2,5	0,5	2,5	4,4	1,7	0	0,1	5
Play	0	0,7	0	0,7	5	0	2,3	4,2	1,8	1,7	1,8	2,5	2,5	0,8	2,4	-0,1	1,7	0	0,1	5
Ref.no.																				
Mode	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Stop	0	2,8	2,7	3,3	1,6	4,8	2,5	2,5	0	0,5	5,8	6	6	0	0	0	5,9	12,2	6	0,1
Play	0	2,7	2,7	3,3	1,6	4,8	2,5	2,5	0	0,4	5,9	6	5,9	0	0	0	5,9	12,2	6	1
Ref.no.																				
Mode	61	62	63	64																
Stop	2,5	2,4	0	0																
Play	2,5	2,4	0	0																

Ref.no.	IC 7301																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	2,5	2,5	5	0	0	5	0	0	0	0	0	1,6	0	0	1,5	0	0	2	0	0
Play	2,5	2,5	5	0	0	5	0	0	0	0	0	1,6	0	1,6	1,5	0	0	2	0	0
Ref.no.																				
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Stop	3,3	0	2	2	2	5	0	5	2,8	2,7	1,1	1,1	1,1	1,3	5	0	5	2,5	2,5	2,5
Play	3,3	0	0	0	2	5	0	5	2,8	2,7	1,1	1,1	1,1	1,1	5	0	5	2,5	2,5	2,5
Ref.no.																				
Mode	41	42	43	44																
Stop	2,5	5	2,5	0																
Play	2,5	5	2,5	0																
Ref.no.																				

Ref.no.	IC 4901																			
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	2,7	2,8	0	2	0	1,9	0	2	0	1,9	0	0	0	1,5	1,2	1,9	2	2	3,5	1,9
Play	2,7	2,8	0	2	0	0	0	2	0	1,9	0	0	0	1,3	1,2	1,9	2	2	3,5	1,9
Ref.no.																				
Mode	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Stop	0	1,9	2,3	3,3	2	0	2,2	4,9	1,9	2	1,9	0	2,1	1,4	4,9	2,1	0	2,2	0	2,3
Play	0	1,9	2,3	3,3	2	0	2,2	4,9	1,9	2	1,9	0	2,1	1,4	4,9	2,1	0	2,2	0	2,3
Ref.no.																				
Mode	41	42	43	44																
Stop	4,1	2	4,9	4,9																
Play	4,1	2	4,9	4,9																
Ref.no.																				

Ref.no.	IC 1340																			
Mode	1	2	3	4	5															
Stop	4,1	2,1	3,1	0	-0,2															
Play	4,2	2,1	3,1	0	-0,2															

Ref.no.	IC 1390																			
Mode	1	2	3	4	5															
Stop	11,9	2,1	8,7	2,5	-0,2															
Play	12,2	2,1	8,7	2,5	-0,2															

Ref.no.	IC 1200																			
Mode	1	2	3																	
Stop	4,2	-0,2	2,3																	
Play	4,3	-0,2	2,3																	

Ref.no.	IC 4905																		
Mode	1	2	3																
Stop	1,6	5	-0,1																
Play	1,6	5	-0,1																

Ref.no.	IC 4904																		
Mode	1	2	3	4	5	6													
Stop	-0,1	1,2	5	1,3	-0,1	1,3													
Play	-0,1	1,2	4,9	1,3	-0,1	1,3													

Ref.no.	IC 4903																		
Mode	1	2	3	4	5	6													
Stop	-0,1	1,2	5	1,4	-0,1	1,3													
Play	-0,1	1,2	4,9	1,5	-0,1	1,3													

Ref.no.	IC 7503																		
Mode	1	2	3	4	5														
Stop	4,7	4,7	-0,1	0	4,3														
Play	4,7	4,7	-0,1	0	4,3														

Ref.no.	IC 2501 (Laufwerk)																		
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Stop	1,5	1,5	1,5	1,9	1,9	1,5	-0,1	5,1	-0,1	-0,1	2,9	2,9	2,9	2,9	4,1	4,1	3,6	3,6	-0,1	3,1
Play	2,9	2,8	2,7	2,9	-0,1	3,2	5	-0,1	2,1	2,3	2,2	1,5	1,5	1,5	4,1	4,1	5,6	2,5	-0,1	3,1
Ref.no.																			
Mode	21	22	23	24	25	26	27	28											
Stop	8,8	3,2	2,6	1,7	1,5	1,5	-0,1	3											
Play	8,7	8,6	1,7	1,5	1,5	1,5	3,2	3											

Ref.no.	IC 2501																		
Mode	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Stop	15	15	15,3	1	5	1	1,1	0,5	2,4	1,3	-0,1	3,7	3,8	3,8	-0,1	15			
Play	14,8	14,8	15,1	1	4,9	1,1	1,1	0,5	2,4	1,3	-0,1	3,8	3,8	3,8	0	14,8			

Ref.no.	IC 1501																		
Mode	1	2	3	4															
Stop	1,1	2,3	0,1	-0,1															
Play	1,1	2,3	5	-0,1															

Ref.no.	IC 1502																		
Mode	1	2	3	4	5														
Stop	-0,1	1,1	0,1	-0,1															
Play	-0,1	1,1	5	-0,1															

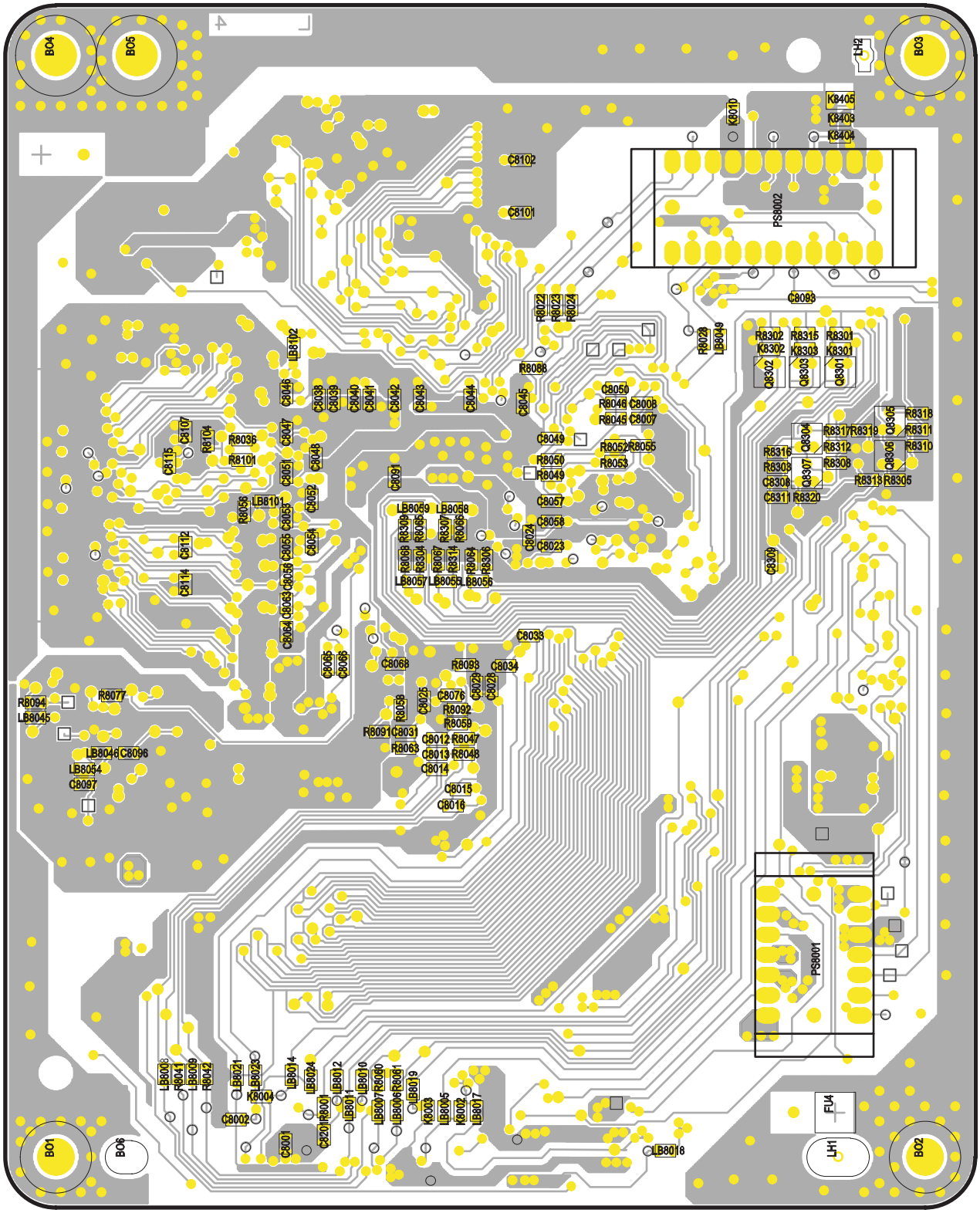
Ref.no.	IC 7504																		
Mode	1	2	3																
Stop	5	-0,1	5																
Play	5	-0,1	5																

Ref.no.	Q1152			Q1151			Q1330			QR1302			QR1301			Q1360			Q1321		
Mode	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C
Stop	-0,1	-0,1	-0,1	0	0	0	34,7	34	34,7	-0,2	2,5	-0,2	-0,2	4,6	-0,2	5	5,8	5,7	1,5	2,2	2,1
Play	0	0	0	0	0	0	34,2	34,9	34,9	-0,1	5,5	-0,1	-0,2	4,7	-0,1	5	5,8	5,7	1,6	2,3	2,2
Ref.no.	Q1322			Q1371			QR1300			Q1361											
Mode	E	B	C	E	B	C	E	B	C	E	B	C									
Stop	1,5	2,2	2,1	-30,5	-29,8	-30,5	2,1	0	2	5	5,7	5,7									
Play	1,6	2,3	2,2	-30,8	-30,1	-30,8	2,1	-0,2	2	5,1	5,8	5,7									

Ref.no.	QR4504			QR4001			Q3001			QR4507			Q4005			Q4003			Q4004		
Mode	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C
Stop	0	4,3	0	0	-0,1	0	1,6	2,2	5	0	-0,1	1	0	0,2	0,2	0	0,7	0	0	0,7	0
Play	0	-2,2	0	0	-0,1	0	1,6	2,2	5	0	-0,1	0,9	0	0,2	0,2	0	0,7	0	0	0,7	0
Ref.no.	Q4006			QR4005			QR4002			QR4503					QR4908						
Mode	E	B	C	E	B	C	E	B	C	1	2	3	4	5	1	2	3	4	5		
Stop	5,5	5,4	0,2	0	-0,1	5,4	5	-0,1	4,9	0	0	4,3	0	4,3	1,7	0	-0,1	-0,1	0		
Play	5,5	5,5	0,2	0	-0,1	5,5	5	-0,1	4,9	0	0	-2,3	0	-2,3	0	2,5	-0,1	-0,1	2,5		

Ref.no.	QR4903			Q4901			QR4906			QR4904			QR4905			Q4903			Q4907		
Mode	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C
Stop	-0,1	1,1	0,1	11,8	12,2	12,2	0	1,9	0	0,5	-0,1	2,8	0,5	0	2,7	0,7	0,1	0,5	-0,1	0	0,7
Play	-0,1	2	0	11,8	12,2	12,2	0	1,1	0	0,6	-0,1	2,8	0,5	-0,1	2,7	0,7	0	0,6	-0,1	0	-2
Ref.no.	Q4908			QR4907			Q4905			Q4906			QR4901			Q4904			QR4902		
Mode	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C
Stop	-0,1	0,7	0	1,7	-0,1	0,8	-0,1	0	5	12,3	0	-0,1	0	4,1	0	4,9	2,6	1,9	-0,1	3,5	0
Play	-0,1	-2	0	0	-0,1	-1,8	-0,1	0	4,9	12,2	0	-0,1	0	4,1	0	4,9	2,6	1,9	-0,1	0	4,1
Ref.no.	Q4909			QR1202			Q1201			QR1201			Q1202			Q1203			QR4502		
Mode	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C
Stop	1,3	0,6	0	12,2	0	12,1	5	5,8	5,5	0	4,6	0	5	5,8	5,5	5	5,8	5,5	0	4,5	4,3
Play	0,9	0,2	0	12,2	0	12,1	5	5,8	5,6	0	4,7	0	5	5,8	5,6	5	5,8	5,6	0	-0,1	-2,1

Ref.no.	QR6102			Q1005			QR6101			Q1001			Q1002			Q1003			Q1004		
Mode	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C
Stop	2	3,1	3,2	3,2	3,9	5,6	5	3,1	3,1	5	5,8	5,6	12,3	12,9	15,3	5,6	5,8	5,6	5	5,8	5,6
Play	2,1	3,1	3,3	3,2	3,9	5,7	5	3,1	3,1	5	5,8	5,7	12,2	12,9	15	5,7	5,8	5,7	5	5,8	5,7
Ref.no.	Q6001			Q6002			QR6001														
Mode	E	B	C	E	B	C	E	B	C												
Stop	0,8	1,5	5	1,1	1,7	5	-0,1	-0,1	12,3												
Play	1,7	2,4	5	1,1	1,7	5	-0,1	-0,1	12,2												



NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
DECODER PCB
SOLDER SIDE

MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE

IC4501

JK4801 (R) (L)

PP4801 6 / PS7501 6 — AV3 IN(R)

PP4801 5 / PS7501 5 — AV3 IN(L)

FRONT JACK PCB

JK4904 (R) ⑨ (L) ⑥ LINE OUT

IC4503

DVD R OUT ⑬ — VCR R OUT ⑫

AV1 R OUT ⑭

DVD L OUT ③ — VCR L OUT ⑤

AV1 L OUT ④

JK4902 AV1

(R) AV1 R OUT ①

(L) AV1 L OUT ③

(R) AV1 R IN ②

(L) AV1 L IN ⑥

FROM QR4902-Ⓔ — DVD Ⓗ ⑨ ⑩ ⑪

DVD L/R MIX ① — VCR NORMAL ②

⑮

AV2

(R) AV2 R OUT ①

(L) AV2 L OUT ③

(R) AV2 R IN ②

(L) AV2 L IN ⑥

AV2 R OUT

AV2 L OUT

AV2 R IN

AV2 L IN

TU7601 TUNER ㉑ — TUNER AUDIO OUT

IC7301

NV-VHD1F ㊳ — NICAM DECODER — ② DEC R OUT

NV-VHD1B/EC/EE ㊸ — ① DEC L OUT

JK4904 (R) ⑧ DVD OUT (L) ⑤

FROM DVD AUDIO BLOCK DIAGRAM

PS8002 19 / P4301 19 — AUDO R (OUT)

PS8002 21 / P4301 21 — AUDIO L (OUT)

AV DECODER PCB

I/O SECTION

AUDIO/VIDEO SECTION

VHS MAIN PCB

IC3001

TO AC HEAD — A.HEAD(W) — P4003 4 — ㊽ REC EQ — MUTE — VCA — R / P — ② — ⑥ MUTE

FROM AC HEAD — A.HEAD(R) — P4003 3 — ㊻ PRE AMP — th TRAP

MUTE CTL ⑦⑨ — MUTE Ⓗ

QR4503

MUTE ㊶ — SWITCH RCH

MUTE ㊷ — SWITCH LCH

AV1 R IN ⑨

AV2 R IN ⑩

AV1 L IN ⑭

AV2 L IN ⑮

INPUT SELECT SWITCH RCH

INPUT SELECT SWITCH LCH

OUTPUT SELECT SWITCH RCH

OUTPUT SELECT SWITCH LCH

AGC & SWITCH

PNR RCH

PNR LCH

NORMAL SELECT SWITCH

⑥② ⑥① ④ ③ ① ⑧ ⑬

IIC BUS INTERFACE — ㊷ IIC CLK S — ㊸ IIC DATA S

VCO F0 ㊺ — FSC

㉗ — AUDIO H.SW

FM MODULATOR/ DEMODULATOR

LPF

BPF

PREAMP & SWITCH

AGC

AGC & SWITCH

TW4501 — Hi-Fi AUDIO HEAD — P5001 ㉔ L — P5001 ㉑ 9 R — P5001 ㉒ 10

㉚ — PB60Hz Ⓗ — QR4507

FROM SYSCON

TO / FROM SYSCON

FROM SYSCON

FROM SYSCON

Note:
Marked *(spare) parts are not assembled

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When replacing any of these components use only the same type.

NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
VCR AUDIO
BLOCK DIAGRAM

AV DECODER PCB

MAIN SIGNAL

I/O SECTION

IC8001
(AV DECODER)

IC8402
(AUDIO D/A CONVERTER)

51 BCLK → BCK 1
56 LRCL → LRCK 3
52 SDATA → DATA 2
190 ML → ML 15
192 MC → MC 14
191 MDI → MDI
55 SCLK → SCK 16

AUDIO SERIAL PORT
SERIAL CONTROL PORT
OVERSAMPLING DIGITAL FILTER WITH FUNCTION CONTROLLER
ENHANCED MULTI-LEVEL DELTA-SIGMA MODULATOR
SYSTEM CLOCK MANAGER
SYSTEM CLOCK
ZERO DETECT

DAC → OUTPUT AMP AND LOW-PASS FILTER → 7 V OUT L → PS8002 21 / P4301 21

DAC → OUTPUT AMP AND LOW-PASS FILTER → 8 V OUT R → PS8002 19 / P4301 19

ZERO 11

QR8001
49 A_MUTE_H → AUDIO MUTE

QR4908
5 A_MUTE
3 DVD MUTE
4

181 IEC OUT → PS8002 12 / P4301 12

IC4905
GND 1
VCC 2
VIN 3
DIGITAL AUDIO OUT OPTICAL

SYSCON & SERVO

IC6101
25 NF_OFF

Note:
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NV-VP25EC
VP30EC/EB/EBL/EP/EF
DVD AUDIO
BLOCK DIAGRAM

G F E D C B A

1 2 3 4 5 6 7 8 9 10 11

TERMINAL PCB

AV DECODER PCB

OPTICAL PICK UP UNIT

MOTOR DRIVE

SPINDLE MOTOR

TRAVERSE MOTOR

FP5201	P8001	
45	6	RFN
FP5201	P8001	
46	5	RFP

IC8001
(AV DECORDER)

120 RFINN

121 RFINP

EXADR16

DATA

EXADR20

IC8103
(64Mbit FlashROM)

A20

A16

A0

A7

A8

A15

XCE 26

XWE 11

XOE 28

DQ0

DQ15

18 NEX WE

46 NEX OE

33 NEX CE

IC8101

Q0

Q7

LATCH

D0

D7

11 LE

FADR8 .... FADR15

EXADT8

DATA

EXADT15

IC8102

Q0

Q7

LATCH

D0

D7

11 LE

FADR0 .... FADR7

EXADT0

DATA

EXADT7

IC8004

X8004
36,8
MHz

PLL

3 50 MHz

15 33,8 MHz

92 OSC1

92 OSC1

Note:
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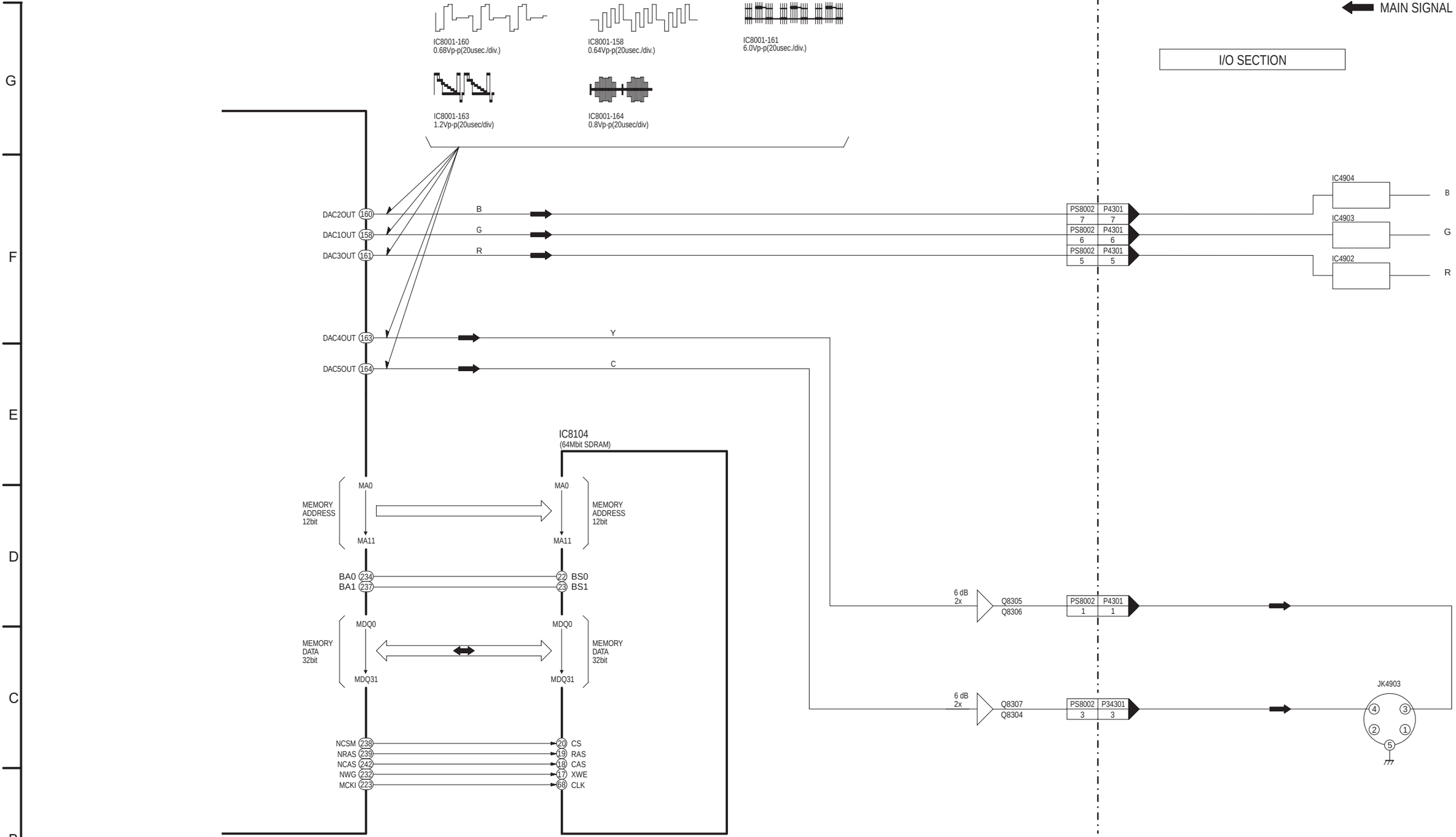
NV-VP25EC
VP30EC/EB/EBL/EP/EF
DVD VIDEO 1/2
BLOCK DIAGRAM



Note:
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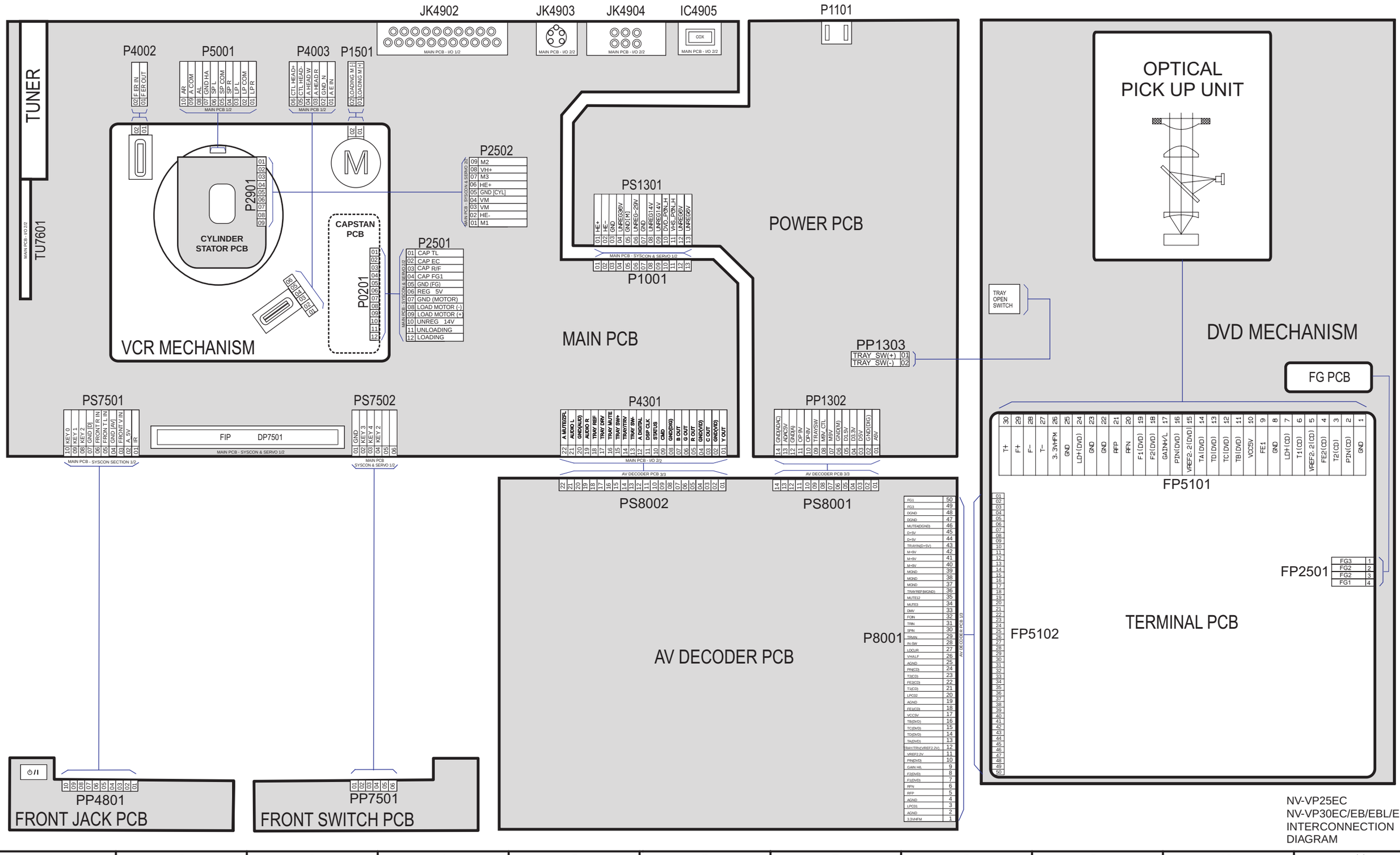
NV-VP25EC
VP30EC/EB/EBL/EP/EF
DVD VIDEO 2/2
BLOCK DIAGRAM


TUNER
TU7601
MAIN PCB - I/O 2/2
JK4902
JK4903
JK4904
IC4905
P1101
MAIN PCB - I/O 1/2
MAIN PCB - I/O 2/2
MAIN PCB - I/O 2/2
MAIN PCB - I/O 2/2
P4002
P5001
P4003
P1501
F ER IN
F ER OUT
AR
A COM
AL
GND HA
SP L
SP COM
SP R
LP L
LP COM
LP R
CTL HEAD+
CTL HEAD-
A HEAD W
A HEAD R
GND_N
A E IN
LOADING M (-)
LOADING M (+)
MAIN PCB 1/2
MAIN PCB 1/2
MAIN PCB 1/2
P2502
M2
VH+
M3
HE+
GND [CYL]
VM
VM
HE-
M1
MAIN PCB - SYSCON & SERVO 1/2
P2901
CYLINDER
STATOR PCB
CAPSTAN
PCB
P2501
CAP TL
CAP EC
CAP R/F
CAP FG1
GND (FG)
REG 5V
GND (MOTOR)
LOAD MOTOR (-)
LOAD MOTOR (+)
UNREG 14V
UNLOADING
LOADING
P0201
MAIN PCB - SYSCON & SERVO 1/2
VCR MECHANISM
PS1301
HE+
HE-
GND
UNREG36V
GND [M1]
UNREG-29V
GND
UNREG14V
UNREG14V
DVD_PON_H
VFS_PON_H
UNREG5V
UNREG5V
MAIN PCB - SYSCON & SERVO 1/2
P1001
POWER PCB
MAIN PCB
OPTICAL
PICK UP UNIT
TRAY
OPEN
SWITCH
PP1303
TRAY SW(+)
TRAY SW(-)
DVD MECHANISM
FG PCB
PS7501
KEY 0
KEY 1
KEY 2
GND [D]
FRONT R IN
FRON T L IN
GND [AV]
FRONT V IN
A 5V
IR
MAIN PCB - SYSCON SECTION 1/2
FIP DP7501
MAIN PCB - SYSCON & SERVO 1/2
PS7502
GND
KEY 3
KEY 4
KEY 2
MAIN PCB
SYSCON & SERVO 1/2
P4301
A MUTE2R
AUDIO L
GND(AUD)
AUDIO R
TRAY REF
TRAY DRV
TRAY MUTE
TRAYFRV
TRAYFRV
A DECODE
DSP CLK
STATUS
GND
GND(DIG)
B OUT
G OUT
R OUT
GND(VID)
C OUT
GND(VID)
Y OUT
MAIN PCB - I/O 2/2
PP1302
GND(ADAC)
ADAC5V
GND(A)
OP-9V
OP-5V
TRAYSW
MAV_CTL
GND(M)
D1.5V
D3.3V
D5V
GND(DIG)
A6V
AV DECODER PCB 3/3
AV DECODER PCB 3/3
PS8002
PS8001
AV DECODER PCB
P8001
AV DECODER PCB 3/3
FP5101
T+
F+
F-
T-
3.3V+FM
GND
LDF(DVD)
GND
GND
RFP
RFN
F1(DVD)
F2(DVD)
GAIN+/-L
PIN(DVD)
VREF2.2(DVD)
TA(DVD)
TD(DVD)
TC(DVD)
TB(DVD)
VCC5V
FE1
GND
LDF(CD)
T1(CD)
VREF2.2(CD)
FE2(CD)
T2(CD)
PIN(CD)
GND
FP2501
FG3
FG2
FG2
FG1
FP5102
TERMINAL PCB
PP4801
FRONT JACK PCB
PP7501
FRONT SWITCH PCB
NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
INTERCONNECTION
DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

IC4901
(INPUT/OUTPUT SELECT)

IIC BUS INTERFACE
DATA 1
CLOCK 2

FROM FRONT JACK PCB
PS7501 3
VIDEO IN 20
CLAMP
V IN [FROM YC] 23

JK4902 AV1(TV)
19 VIDEO OUT
20 VIDEO IN
V IN 5 (AV) 22
CLAMP
JK4904 2
CPS DVD OUT 31
V OUT AV1 33

JK4902 AV2 (DECODER)
19 VIDEO OUT
20 VIDEO IN
V OUT AV2 34
V IN 4 (AV2) 16
CLAMP

TV DEMODULATOR
24 TUNER VIDEO
V IN 2 (TUNER) 36
CLAMP

CLAMP
V IN 3 [FROM YC] 40

CPS OUT 14

Q6001
BUFFER
VIDEO OUT 15
VIDEO IN 16

IC6001
OSD SIGNAL PROCESS
62
50
72 IIC DATA
71 IIC CLOCK
59
L6002, C6006
BPF
Q6003
BUFFER

IC6003
(OSD u-COM SLICER)
5 SDA
4 SCL
VCBS 17
Q6004
AMP

NV-VP30 EF ONLY

From System Control
BW-H
QR8801
FSC
SECAM Ⓓ
QR8802
IC8801
1 MODE
2 CLK_IN
4 BEP_DELAY
12 REC_OUT
14 PB_IN
PB_OUT 18
TEST 17
REC_IN 16
29 SYNC
From Lu & Chr.
Q8801 (BUFFER)
24
Q8801
23
FROM SYSCON
PB_SECAM C
PB SECAM C 3
V.EE Ⓓ
REC_CHROMA
REC CHROMA 1
RF_CHROMA
RF CHROMA 2
REC_SECAM C.
REC SECAM C 4
IC8803
10 SECAM
9 VCC
8 FSC
DET_OUT 1
CIN
BGP 5
3
2
1
Q8801
IC8802
VCC 16
Q2 10
VIDEO_5V
QR8804

Note:
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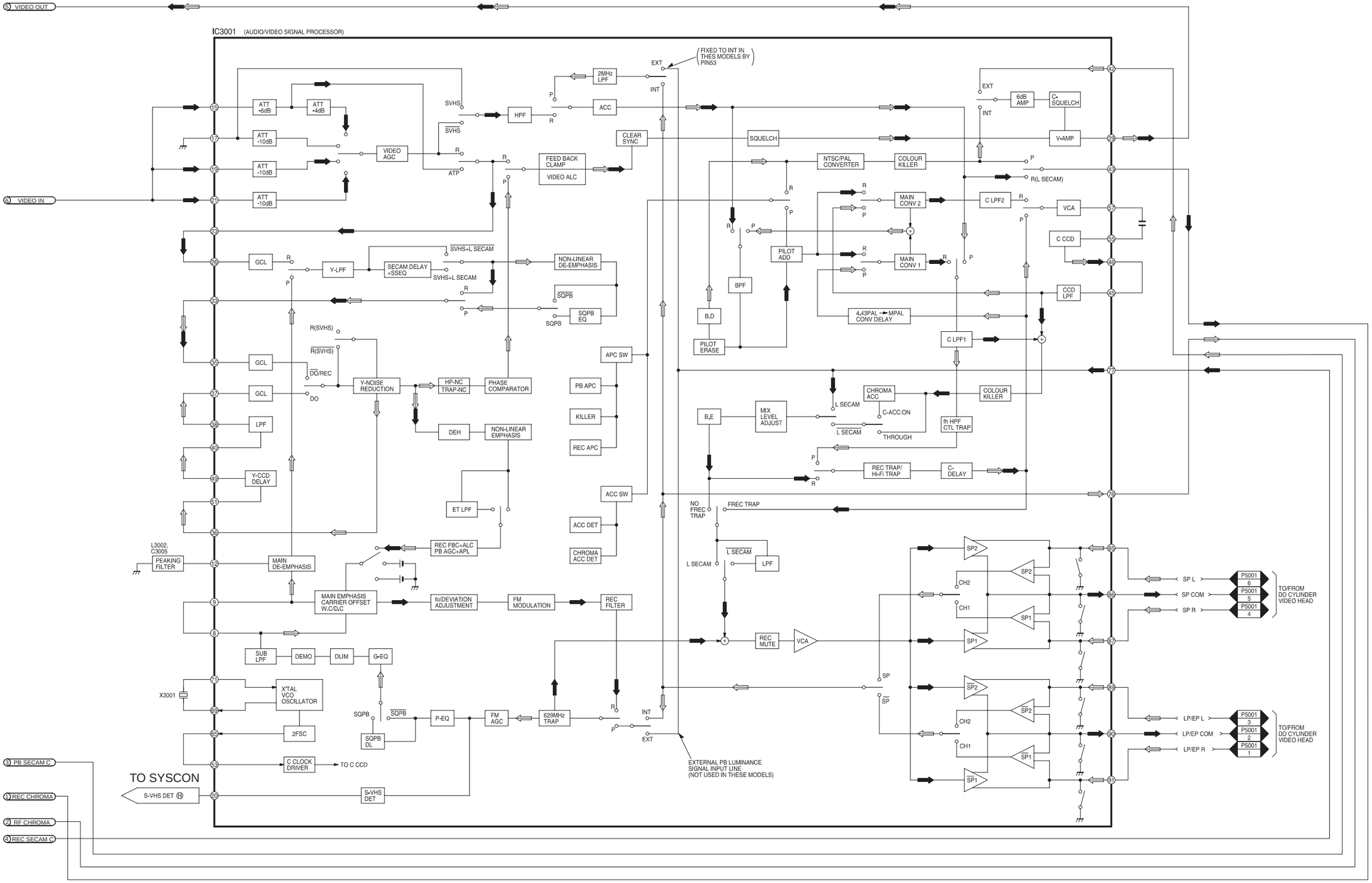
NV-VP25EC
VP30EC/EB/EBL/EP/EF
VCR LUMINANCE & CHROMINANCE 1/2
BLOCK DIAGRAM



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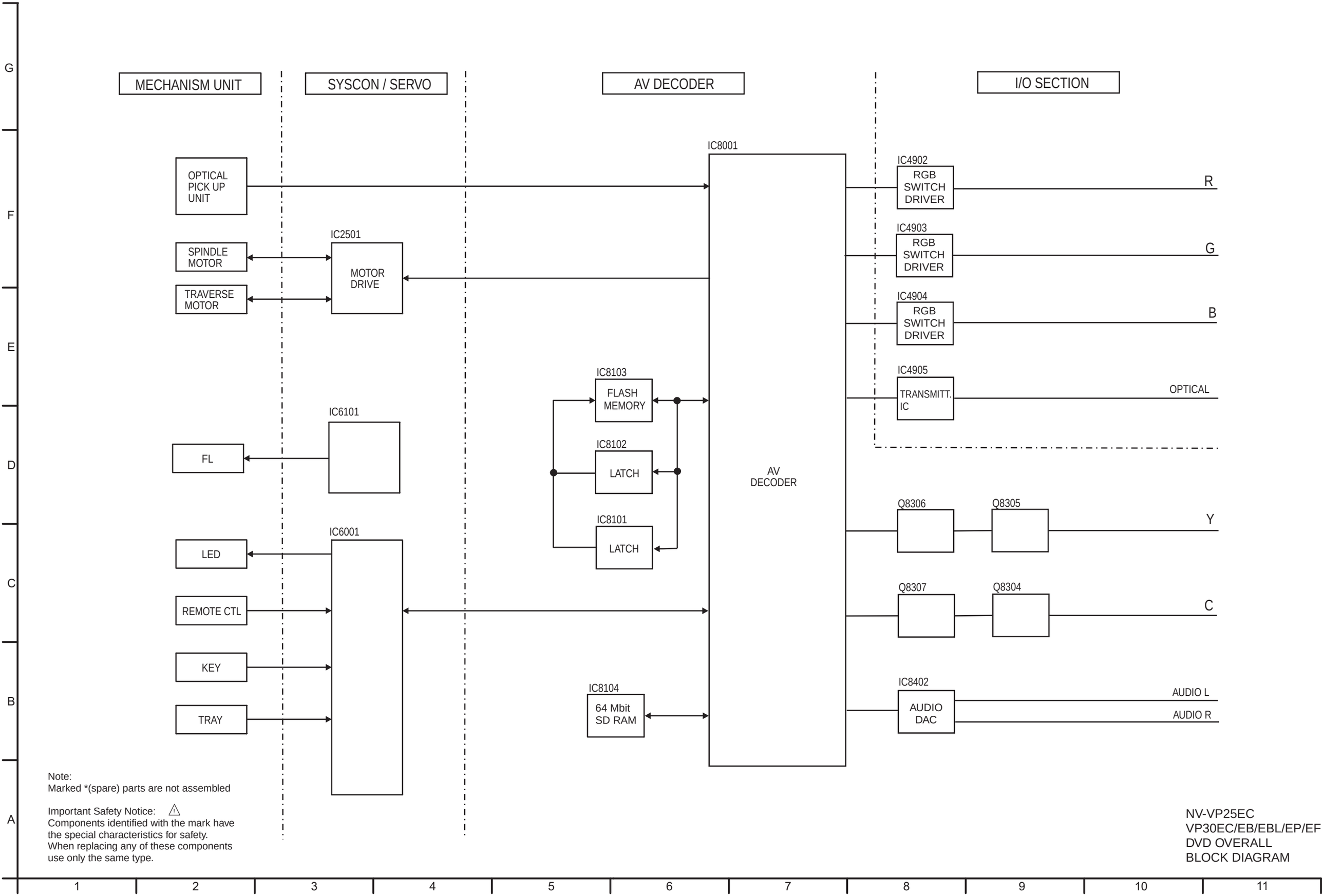
NV-VP25EC
VP30EC/EB/EBL/EP/EF
VCR LUMINANCE & CHROMINANCE 2/2
BLOCK DIAGRAM



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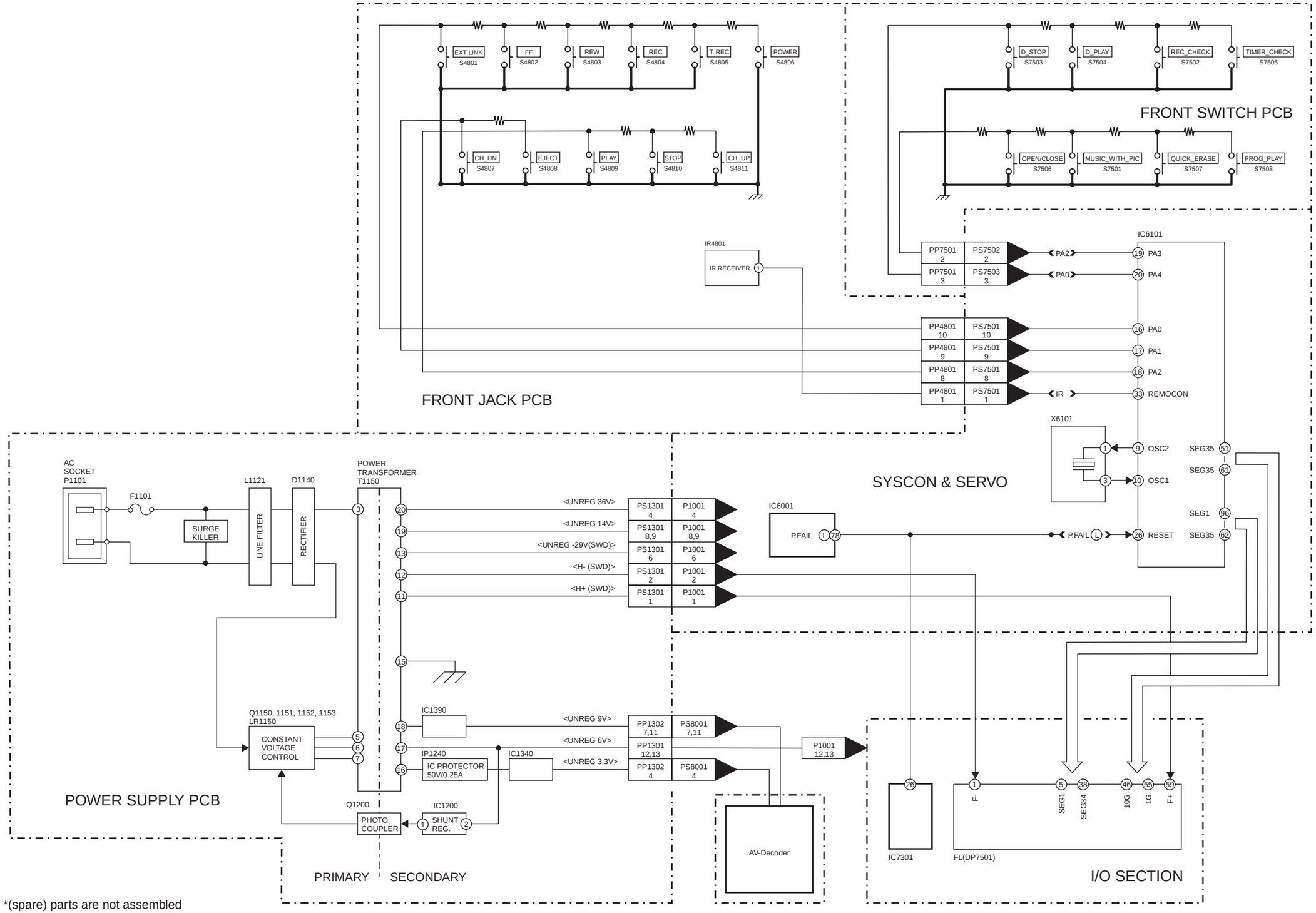
NV-VP25EC
VP30EC/EB/EBL/EP/EF
DVD OVERALL
BLOCK DIAGRAM



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NV-VP25EC
VP30EC/EB/EBL/EP/EF
POWER SUPPLY
BLOCK DIAGRAM

OPTICAL PICK UP UNIT

AV DECODER PCB

TERMINAL PCB

RF SIGNAL

MOTOR DRIVE SIGNAL

TRACKING ERROR SIGNAL

FOCUS ERROR SIGNAL

IC8001

IC2501
(MOTOR DRIVE)

PHOTO DETECTOR

B1 B2 A1 A2 A4 A3 B4 B3

HEAD AMP

VIN5 122
VIN6 123
VIN7 124
VIN8 125
VIN1 126
VIN2 127
VIN3 128
VIN4 129
VIN9 130
VIN10 131

LASER DIODE DVD

Q8002 LD DRIVE 133
132

LASER DIODE CD

Q8003 LD DRIVE 135
134

RFINN 120
RFINP 121

DRV0 70
DAC1 150
DAC0 152
DRV1 71
AD0 148

FROM IC6001-41,42PIN

Tray DRV 24

TRIN 26
VIN1 2
VIN2 3
VIN3 23
OPOUT 6
LDIN

BIAS1
BIAS2

LEVEL SHIFT

VO4+ 15
VO4- 16
OPIN+ 4
VO3+ 17
VO3- 18
OPIN- 5
VO1+ 14
VO1- 13
VO2+ 12
VO2- 11

M2502
TRAVERS MOTOR

M2501
SPINDLE MOTOR

IC2511-11,12,13,14
1.2Vp-p(0.5usec./div.)

OPTICAL PICK UP UNIT

ACTUATOR

FOCUS COIL

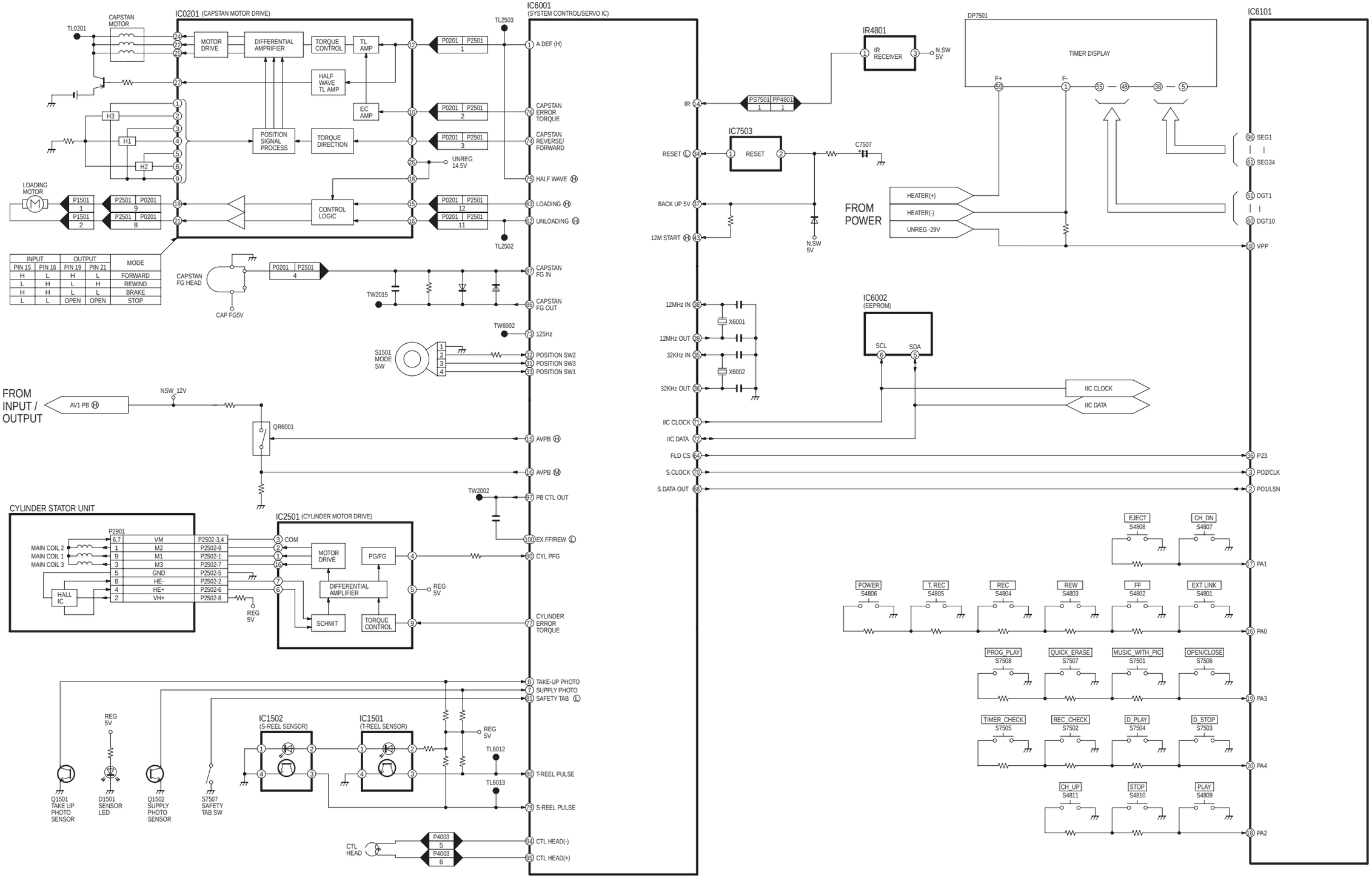
TRACKING COIL

ACT T+
ACT T-
ACT F+
ACT F-

Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.

NV-VP25EC
VP30EC/EB/EBL/EP/EF
SERVO SECTION
BLOCK DIAGRAM



INPUT		OUTPUT		MODE
PIN 15	PIN 16	PIN 19	PIN 21	
H	L	H	L	FORWARD
L	H	L	H	REWIND
H	H	L	L	BRAKE
L	L	OPEN	OPEN	STOP

Note:
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NV-VP25EC
VP30EC/EB/EBL/EP/EF
MAIN PCB - SYSCON & SERVO
BLOCK DIAGRAM

443NT [L]	4.43 NTSC Ⓛ
A. COMP	AUDIO COMPONENT SIGNAL
A. COMPO	AUDIO COMPONENT SIGNAL
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ
A. DEF [S]	AUDIO DEFEAT
A. DEF [S] [L]	AUDIO DEFEAT
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ
A. DUB [H]	AUDIO DUBBING Ⓗ
A. ERASE	AUDIO ERASE
A. H. SW	AUDIO HEAD SWITCHING PULSE
A. HEAD [R]	AUDIO HEAD (REC)
A. HEAD [W]	AUDIO HEAD (PLAY)
A. IN [L]	AUDIO INPUT (L)
A. IN [R]	AUDIO INPUT (R)
A. MUT [H]	AUDIO MUTE Ⓗ
A. MUTE [H]	AUDIO MUTE Ⓗ
A. OUT [L]	AUDIO OUTPUT (L)
A. OUT [R]	AUDIO OUTPUT (R)
A. RF OUT	AUDIO RF SIGNAL OUTPUT
A/VS/S. DATA	AV SW/SERIAL DATA
AC ONLINE	AC ONLINE
AC. O/EE. H	AC ONLINE/EE Ⓗ
AFC S C	AFC S CURVE
AFC [S]	AFC S CURVE
AFC. DEF	AFC DEFEAT
ARFC OUT	AUDIO RF SIGNAL OUTPUT
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL Ⓗ/NORMAL
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE
AUDIO IN [L]	AUDIO INPUT (L)
AUDIO IN [R]	AUDIO INPUT (R)
AUDIO OUT [L]	AUDIO OUTPUT (L)
AUDIO OUT [R]	AUDIO OUTPUT (R)
AUDIO SELECT [H]	AUDIO SELECT Ⓗ
AUDIO. L	AUDIO (L)
AUDIO. R	AUDIO (R)
AV CNT	AV CONTROL
AV CTL	AV CONTROL
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK
AV. C.M.	AV CONTROL MODE
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)
AVSW/METER. L	AV SW/LEVEL METER (L)
B MODE. H	B MODE Ⓗ
B.G.P	BURST GATE PULSE
BACKUP 5V	BACK UP 5V
BAND. U.E.	BAND U
BANDVL. D	BAND VL
BI/MI [L]	BILINGUAL/MIX Ⓛ
BIL	BILINGUAL
BIL [L]	BILINGUAL Ⓛ
BIL. [H]	BILINGUAL Ⓗ
BIL/M1 [L]	BILINGUAL Ⓛ
BS CLOCK	BS CLOCK
BS DATA	BS DATA
BS LCH IN	BS L CHANNEL INPUT
BS MIX [H]	BS MIX Ⓗ
BS MON [H]	BS MONITOR Ⓗ
BS MONI [H]	BS MONITOR Ⓗ
BS RCH IN	BS R CHANNEL INPUT
BS VIDEO	BS VIDEO SIGNAL
BS VIDEO/BS1	BS VIDEO SIGNAL
BS [H]	BS Ⓗ
BS. LEVEL	BS LEVEL
BS. M [H]	BS MONITOR Ⓗ
BS/VTR [H]	BS/VTR Ⓗ
BUS CLK	BUS CLOCK
BUS LSN	BUS LISTEN
BUS TLK	BUS TALK
BUZZER	BUZZER
CAP EC	CAPSTAN TORQUE CONTROL
CAP M GND	CAPSTAN MOTOR GND
CAP. ET	CAPSTAN TORQUE CONTROL
CAP. FG1	CAPSTAN FG1 PULSE
CAP. FG2	CAPSTAN FG2 PULSE
CAS. SW	CASSETTE SW
CCN	PLAYBACK CONTROL SIGNAL (–)
CCP	PLAYBACK CONTROL SIGNAL (+)
CHM	CONTROL SIGNAL (+)
CHP	CONTROL SIGNAL (–)
CINEM [L]	CINEMA Ⓛ
CINEMA [L]	CINEMA Ⓛ
CINEMA/MIX	CINEMA/MIX
CKL	RATCH LOCK
CKS	SHIFT LOCK
CL	CLOCK
CLK	CLOCK
CLK (C.G)	CLOCK
CLOCK. IN	CLOCK INPUT
CLP	CLAMP
COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
COLOR [H]	COLOUR Ⓗ
CONV	CONVERTOR
CS	CHIP SELECT
CTL GND	CONTROL GND
CTL HEAD [+]	CONTROL HEAD (+)
CTL HEAD [–]	CONTROL HEAD (–)
CTL [+]	CONTROL HEAD (+)
CTL [–]	CONTROL HEAD (–)
CUE BIAS	CUE BIAS
CURRENT LIM	CURRENT LIMMITER
CYL ET	CYLINDER TORQUE CONTROL

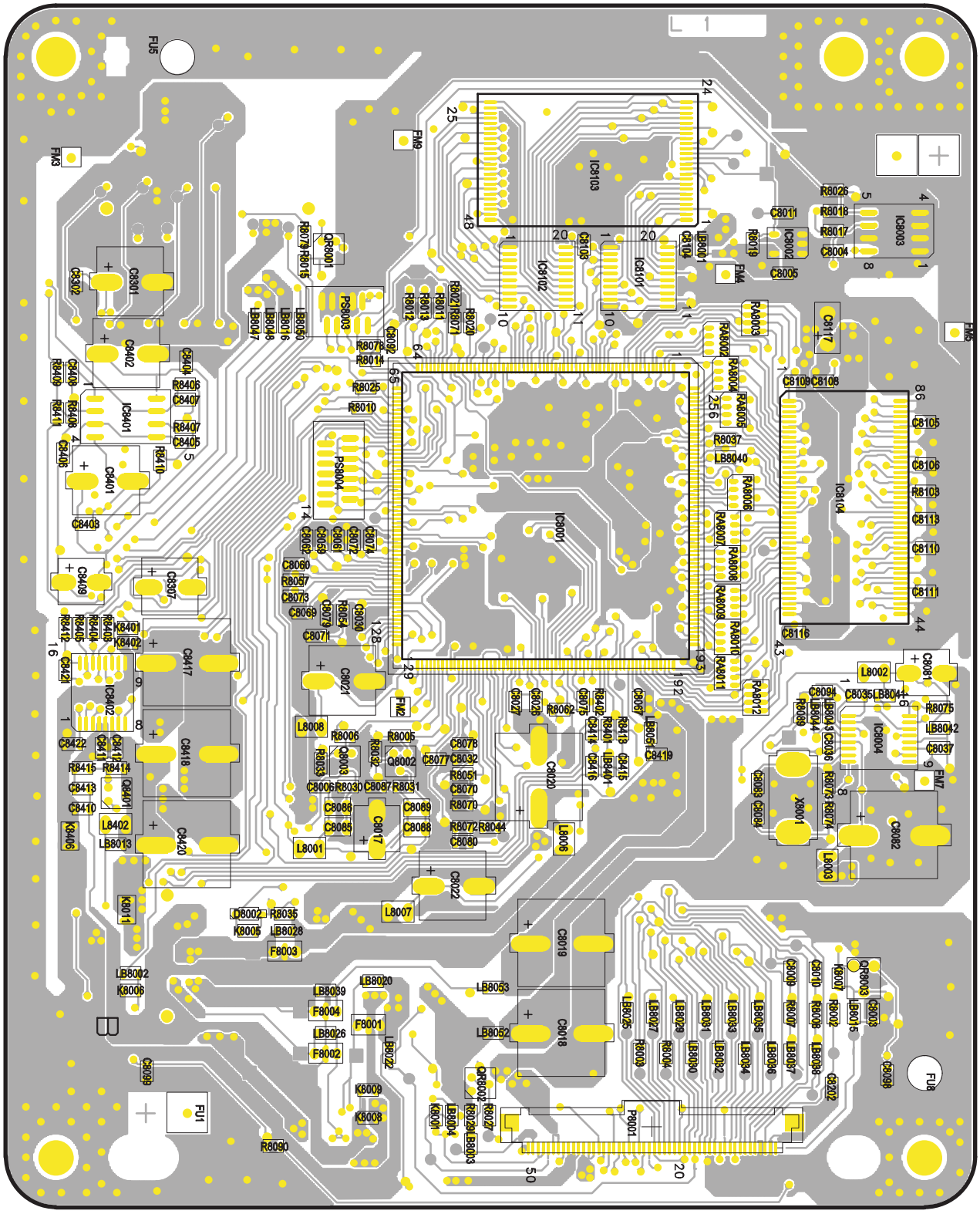
CYL GND	CYLINDER GND
D.F.M. REC [H]	DELAIED FM RECORDING Ⓗ
D. FM REC [L]	DELAIED FM RECORDING Ⓛ
D. GND	DIGITAL GND
D. REC [H]	DELAYED RECORDING Ⓗ
D4/S. LED	D4/STILL LED
D4/STILLED	D4/STILL LED
DAC [CLK]	TUNER DAC (CLOCK)
DAC/FSCS	TUNER DAC/FS CHIP SELECT
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ
DATA	DATA
DECODER [L]	DECODER (L)
DECODER [R]	DECODER (R)
DEW	DEW
DEW SNS	DEW SENSOR
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ
E. REC 5V	EXCEPT RECORDING 5V
EC	ERROR TORQUE CONTROL
ECR	ERROR TORQUE CONTROL REFERENCE VOLTAGE
EDT TRIG [L]	EDIT TRIGGER Ⓛ
EDIT [H]	EDIT Ⓗ
EE [H]	EE Ⓗ
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ
EE. VV. TR	EE/VV/TRICK PLAY
EJECT. PO	EJECT POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK
ENV. SEL	ENVELOPE SELECT
ENVE. OUT	ENVELOPE OUTPUT
ENVE. SEL	ENVELOPE SELECT
ENV SELECT	ENVELOPE SELECT
EP [H]	LP Ⓗ
EP/LP [H]	LP Ⓗ
EP/LP/SP	LP/SP
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ
EPROMCS	EPROM CHIP SELECT
EX. REC 5V	EXCEPT RECORDING 5V
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ
FG1 IN	FG1 PULSE INPUT
FG2 IN	FG2 PULSE INPUT
FILTER ADJUSTMENT	FILTER ADJUSTMENT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ
FLY ON [H]	FLYING ERASE HEAD ON Ⓗ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ
FM MUT [H]	FM AUDIO MUTE Ⓗ
FM MUTE [H]	FM AUDIO MUTE Ⓗ
FM OUT [L]	FM OUTPUT (L)
FM OUT [R]	FM OUTPUT (R)
FM PACK OUT [L]	FM PACK OUTPUT (L)
FM PACK OUT [R]	FM PACK OUTPUT (R)
FM/BS SEL [L]	FM/BS SELECT (L)
FM/BS SEL [R]	FM/BS SELECT (R)
FS. CLK	FS CLOCK
FUL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E [H]	FULL ERASE HEAD ON Ⓗ

FULL. E. 12V	FULL ERASE 12V
GND [A]	GND (ANALOG)
GND [TU]	GND (TUNER)
GND/N. SW. 12V	GND/NON SW 12V
H. SYNC	HORIZONTAL SYNC
H. AMP. SW	HEAD AMP SW PULSE
H. P <R>	HEAD PHONE (R)
H. P <L>	HEAD PHONE (L)
H. P GND	HEAD PHONE GND
H. P OUT [L]	HEAD PHONE OUTPUT (L)
H. P OUT [R]	HEAD PHONE OUTPUT (R)
H. SW	HEAD SW PULSE
HEAD PHONE [L]	HEAD PHONE (L)
HEAD PHONE [R]	HEAD PHONE (R)
HEAD SW	HEAD SW
HEATER [+]	HEATER (+)
HEATER [–]	HEATER (–)
HSS	HORIZONTAL SYNC SIGNAL
HTR [+]	HEATER (+)
HTR [–]	HEATER (–)
I RFE	REFERENCE CURRENT
ICL	CONTROL AGC CIRCUIT
IF	INTERMEDIATE FREQUENCY
IN SELA1	INPUT SELECT A1 POSITION
IN SELA2	INPUT SELECT A2 POSITION
IN SELA3	INPUT SELECT A3 POSITION
INS L/R [L]	INSERT Lch/Rch Ⓛ
INS. [H]	INSERT Ⓗ
INSEL A1	INPUT SELECT A1 POSITION
INSEL A2	INPUT SELECT A2 POSITION
INSERT	INSERT
INSERT [H]	INSERT Ⓗ
IO CS	INPUT/OUTPUT CHIP SELECT
JOG1	JOG1
JOG S3 LED/FOWRD	JOG LED/FORWARD LED
JOG/F. LED	JOG LED/FORWARD LED
JSB [H]	JSB Ⓗ
JST. CLCK	JUST CLOCK
JST. CLK	JUST CLOCK
JST. CLOCK	JUST CLOCK
L. OUT	Lch OUTPUT
L. CH [H]	Lch Ⓗ
L. CH [L]	Lch Ⓛ
LED (MAIN)	LED (MAIN)
LED (STEREO)	LED (STEREO)
LED (SUB)	LED (SUB)
LED CKL	LED SERIAL CLOCK
LED CKS	LED SERIAL CLOCK
LED DATA	LED SERIAL DATA
LINE IN 1 [L]	LINE INPUT 1 (L)
LINE IN 1 [R]	LINE INPUT 1 (R)
LINE IN 2 [L]	LINE INPUT 2 (L)
LINE IN 2 [R]	LINE INPUT 2 (R)
LINE IN V	LINE INPUT VIDEO
LINE IN [L]	LINE INPUT (L)

LINE IN [R]	LINE INPUT (R)
LINE OUT [L]	LINE OUTPUT (L)
LINE OUT [R]	LINE OUTPUT (R)
LP [H]	LP Ⓗ
LPTRI [L]	LP TRICK PLAY Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING
M GND	MOTOR GND
M REG	MOTOR REGULATOR
MAIN OUT	MAIN OUTPUT
MAIN [L]	MAIN Ⓛ
MAIN/MONO	MAIN/MONAURAL
MAX IN	MAXIMAM INPUT
MES [H]	MESECAM Ⓗ
MESE [H]	MESECAM Ⓗ
MESE [L]	MESECAM Ⓛ
METER 5V	LEVEL METER 5V
METER [L]	LEVEL METER (L)
METER [R]	LEVEL METER (R)
METER. L/AVS	LEVEL METER (L)
METER. R/AVC	LEVEL METER (R)
MI/BI [L]	MIX Ⓗ/BILIGUAL
MIC GND	MIC GND
MIC IN	MIC INPUT
MIC IN [L]	MIC INPUT (L)
MIC IN [R]	MIC INPUT (R)
MIC [H]	MIC Ⓗ
MIX [H]	MIX Ⓗ
MIX [H]/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINE	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MN. H/M. L	MONAURAL Ⓗ/MAIN Ⓛ
MN. H/MAI. L	MONAURAL Ⓗ/MAIN Ⓛ
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ
MODE SEL	AUDIO MODE SELECT
MODE SW	AUDIO MODE SW
MODE. S. IN	AUDIO MODE SELECT INPUT
MODE. S. OUT	AUDIO MODE SELECT OUTPUT
MONO [H]	MONAURAL Ⓗ
MONO [H]/MAIN [L]	MONAURAL Ⓗ/MAIN Ⓛ
MONO2 [L]	MONAURAL 2
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)
MOTOR GND	MOTOR GND
MUTE	MUTE
N. A. REC [L]	NORMAL AUDIO RECORDING
N. SW 12V	NON SW 12V
N. SW. 5. DET	NON SW 5V DETECT
NICAM	NICAM
NICAM [L]	NICAM Ⓛ
NOL [H]	PAL Ⓗ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ
NORMAL [H]	NORMAL Ⓗ
NR BIAS	NR BIAS
NTSC [L]	NTSC Ⓛ
OCH	CONTROL AGC CIRCUIT
OUT	OUTPUT

P-OFF [H]	POWER OFF Ⓗ
P-OFF [L]	POWER OFF Ⓛ
P. FAIL	POWER FAILURE DETECT
P. OFF [H]	POWER OFF Ⓗ
P. OFF [L]	POWER OFF Ⓛ
PAL [H]	PAL Ⓗ
PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓗ
PB ADJ OUT	PLAYBACK ADJUST OUTPUT
PB OUT	PLAYBACK OUTPUT
PB. H	PLAYBACK Ⓗ
PFG	PG/FG
PHOTSN +B	PHOTO SENSOR +B
PICT. CNT	PICTURE CONTROL
PLAY LED/RVS LED	PLAY LED/REVERSE LED
PLAY. PO	PLAY POSITION
PLAY/R. LED	PLAY LED/REVERSE LED
PLY/DEW	PLAY/DEW Ⓗ
POWER OFF [L]	POWER OFF Ⓛ
PREROLL [H]	PREROLL Ⓗ
PWRFAIL	POWER FAILURE DETECT
R. CH [H]	Rch Ⓗ
R. CH [L]	Rch Ⓛ
R. ST	RESET
R/S/F	REVERSE Ⓗ/STOP Ⓜ/FORWARD Ⓛ
RCH [H]	Rch Ⓗ
REC 12V	RECORDING 12V
REC CHROMA	RECORDING CHROMINANCE SIGNAL
REC H	RECORDING Ⓗ
REC IN	RECORDING INPUT
REC OUT [L]	RECORDING OUTPUT Ⓛ
REC START	RECORDING START
REC VR [C]	RECORDING VOLUME (COMMON)
REC VR [L]	RECORDING VOLUME (L)
REC VR [R]	RECORDING VOLUME (R)
REC Y	RECORDING LUMINANCE SIGNAL
REC [H]	RECORDING Ⓗ
REC. C	RECORDING CHROMINANCE SIGNAL
REC. Y	RECORDING LUMINANCE SIGNAL
REC/EE CTL	RECORDING/EE CONTROL
REEL-T	REEL PULSE (TAKE-UP)
REEL-S	REEL PULSE (SUPPLY)
REGULATOR FILTER	REGULATOR FILTER
RESET	RESET
REV M F/R	REVIEW MOTOR FORWARD/REVERSE
REV M V1	REVIEW MOTOR V1
REV M V2	REVIEW MOTOR V2
REV MOTOR F/R	REVIEW MOTOR FORWARD/REVERSE
REV MOTOR V1	REVIEW MOTOR V1
REV MOTOR V2	REVIEW MOTOR V2
REV MOTOR [+]	REVIEW MOTOR (+)
REV MOTOR [–]	REVIEW MOTOR (+)
REV. M. GND	REVIEW MOTOR GND
RF. CHROMA	RF CHROMINANCE SIGNAL

RF OUT	RF OUTPUT
RF Y	RF LUMINANCE SIGNAL
RF. Y. IN	RF LUMINANCE SIGNAL INPUT
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT
ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S. TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [–]	SOLENOID (–)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ/NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL:ST	STOP1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE
T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRIC PLAY Ⓛ
TRICK [L]	TRIC PLAY Ⓛ
TRK. ENV	AUTO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	REFERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT



NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
DECODER PCB
COMPONENT SIDE

Front Panel

Device control			
⏻/I	**Standby/on switch ⏻/I**	TIMER CHECK	Displays the timer programme for verification.
⏏ VCR	To eject a video cassette.	QUICK ERASE	Erases a Video cassette.
OPEN / CLOSE ⏏ DVD	Opens and closes the disc tray.	PROG PLAY	Plays back programmed recordings.
REC CHECK	You will be displayed either the Timer menu or an information on the current recording	MUSIC WITH PICTURE	Playback of an audio CD including video output.

Description of some function buttons on the front panel is to be found under Remote control functions.

Display			
▼▼▼	Active picture signal. The symbol appears on the VCR or DVD display. Use the **VCR/DVD OUTPUT** button to switch over the picture signal. To directly change the VCR or DVD output use the **VCR/TV/DVD** toggle switch in combination with a function button (e.g. **PLAY** ▶).	▶	Playback
		❚❚	Still Playback
		▶	Slow Playback
	A video cassette is in.	◀◀ ▶▶	Forward and backward search
	A disc is in.	◀◀ ▶▶	VCR: Fast winding

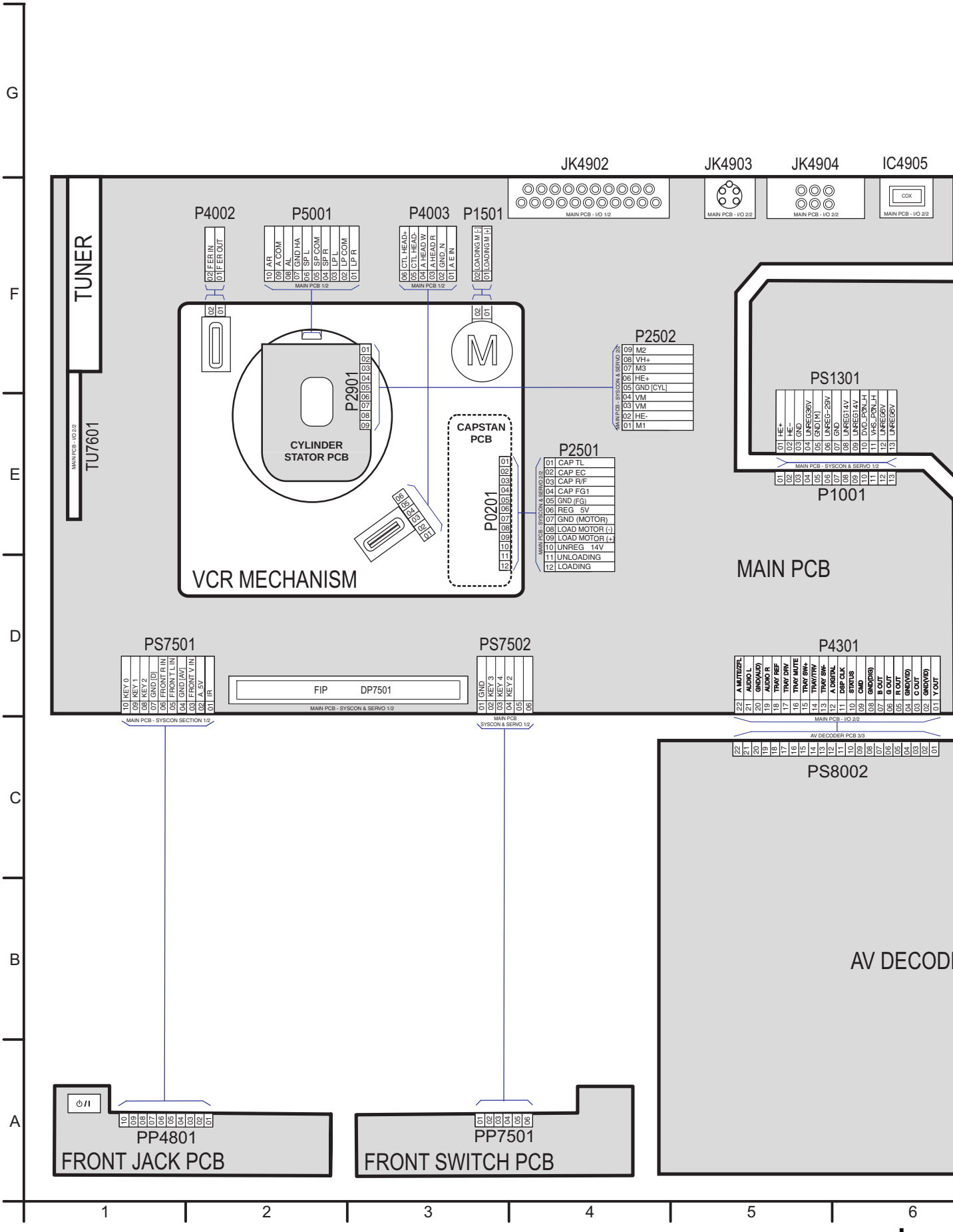
Remote control functions

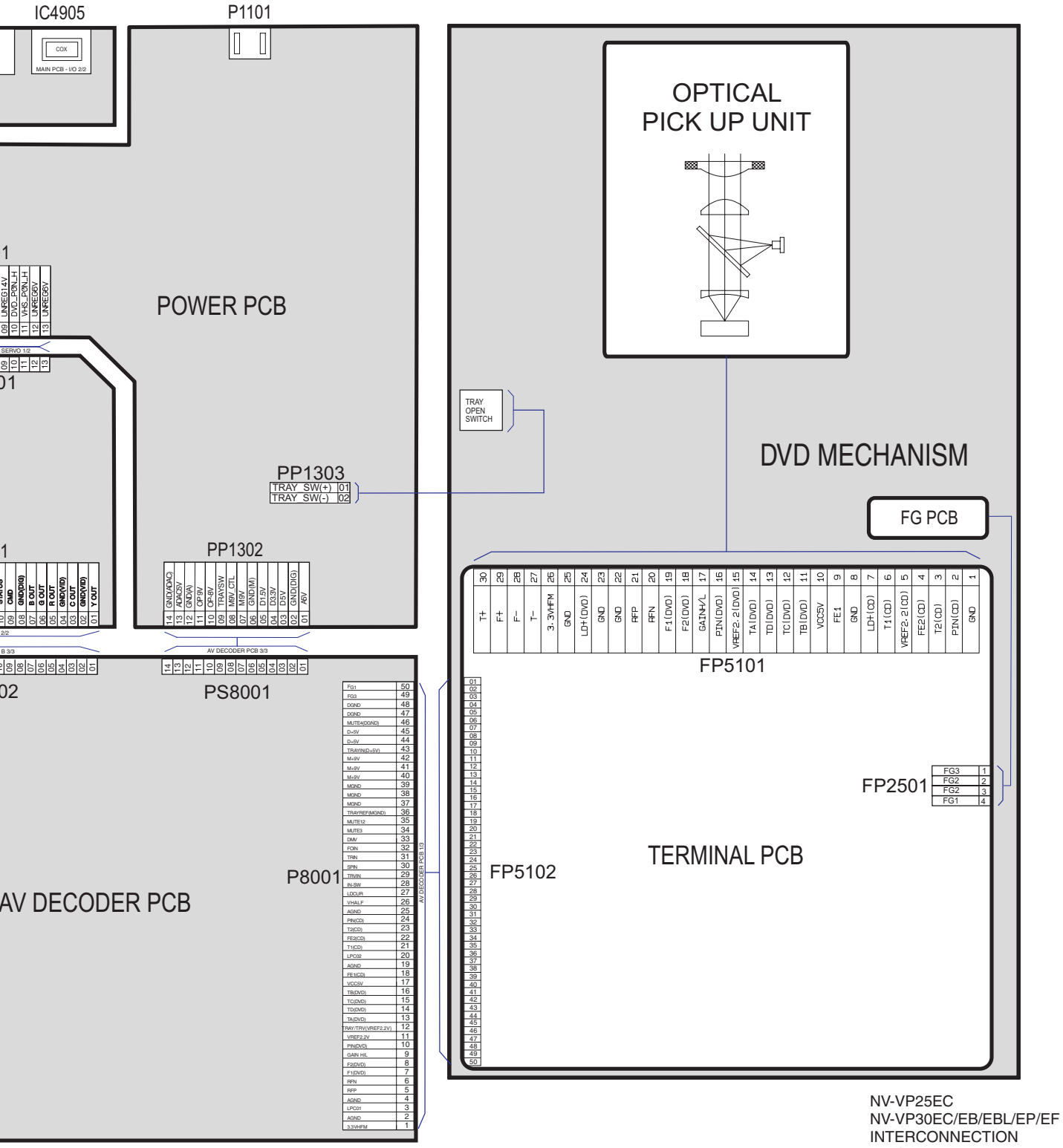
Some TV sets accept control signals from the VCR/DVD's remote control unit. (Page 43).

TV-Operations			
TV ⏻	To switch on and out the TV.	CH	To select the respective TV programme memory location.
INPUT SELECT AV	Selects the TV set's AV port.	VOLUME + −	To control TV set volume.
TV ASPECT	Changes the screen format (e.g. wide-screen).		

General Operations			
VCR/DVD ⏻	**Standby/on switch ⏻/I** Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.	TV VCR DVD	**Remote control toggle switch** For changing between VCR, DVD and TV functions.
ENTER	OSD menu selection buttons. **ENTER:** Selects or saves a setting.	INPUT SELECT AV	**AV input select button** Toggles between input A1, A2, A3 (front) or dc (DVD).
			To eject the cassette / disc Press **STOP** ■ for more than 3 seconds.
EXIT RETURN	Quits a menu.	CANCEL/RESET A	Undoes entries or selections.
OFF TIMER PLAY MODE TV ASPECT	**OFF TIMER:** Switches the unit into standby mode after the set time of recording, playback or in Stop mode.	VCR/DVD OUTPUT	**Output signal select button** Toggles between VCR and DVD signal (for AV1, VCR/DVD OUT).
		1 2 3 4 5 6 7 8 9 0	**Direct input via numeric buttons** (way of input = example: 18= -/-- 1 8)

16 INTERCONNECTION DIAGRAM



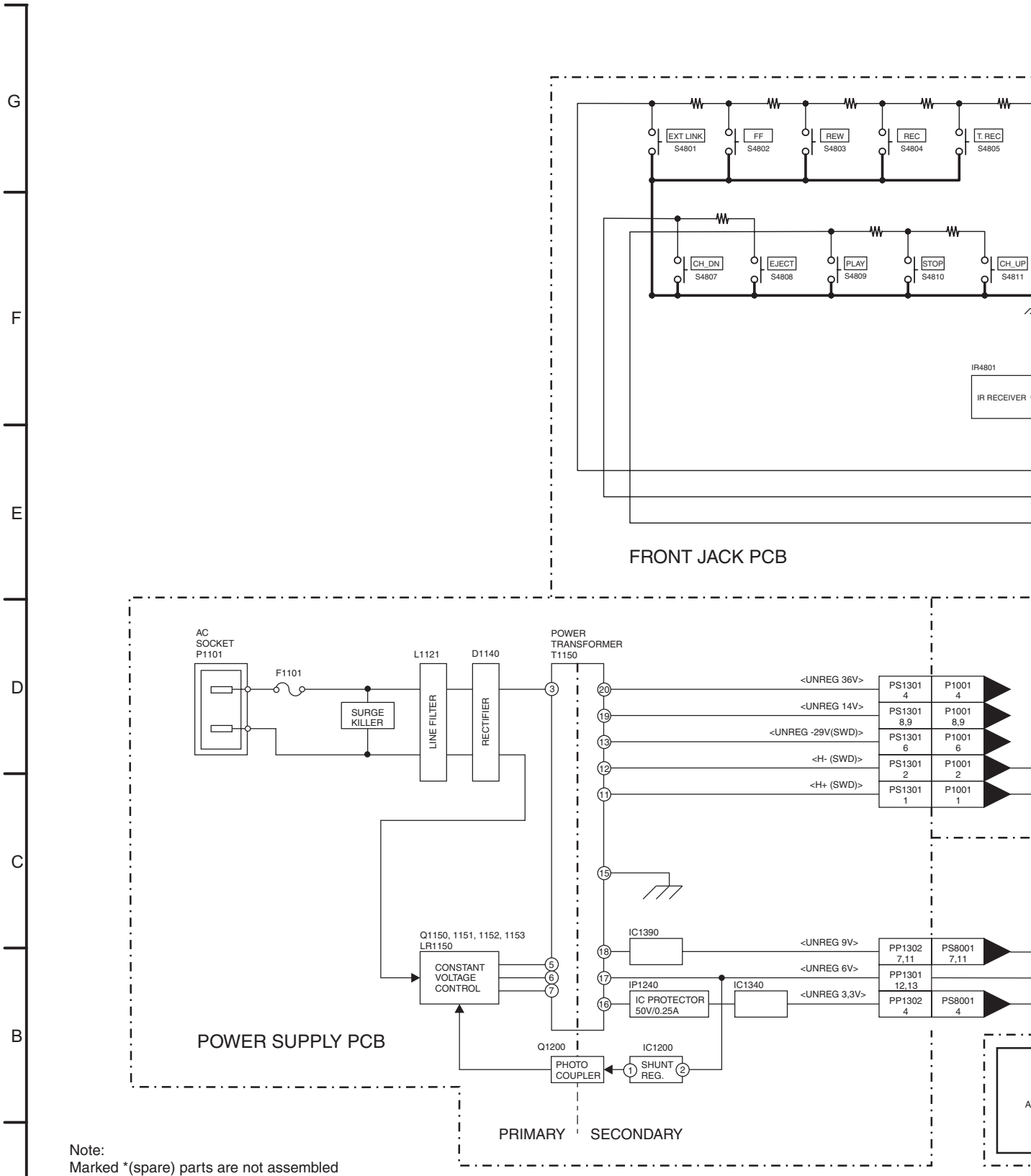


NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
INTERCONNECTION
DIAGRAM

6 7 8 9 10 11

17 BLOCK DIAGRAM

17.1. POWER SUPPLY BLOCK DIAGRAM



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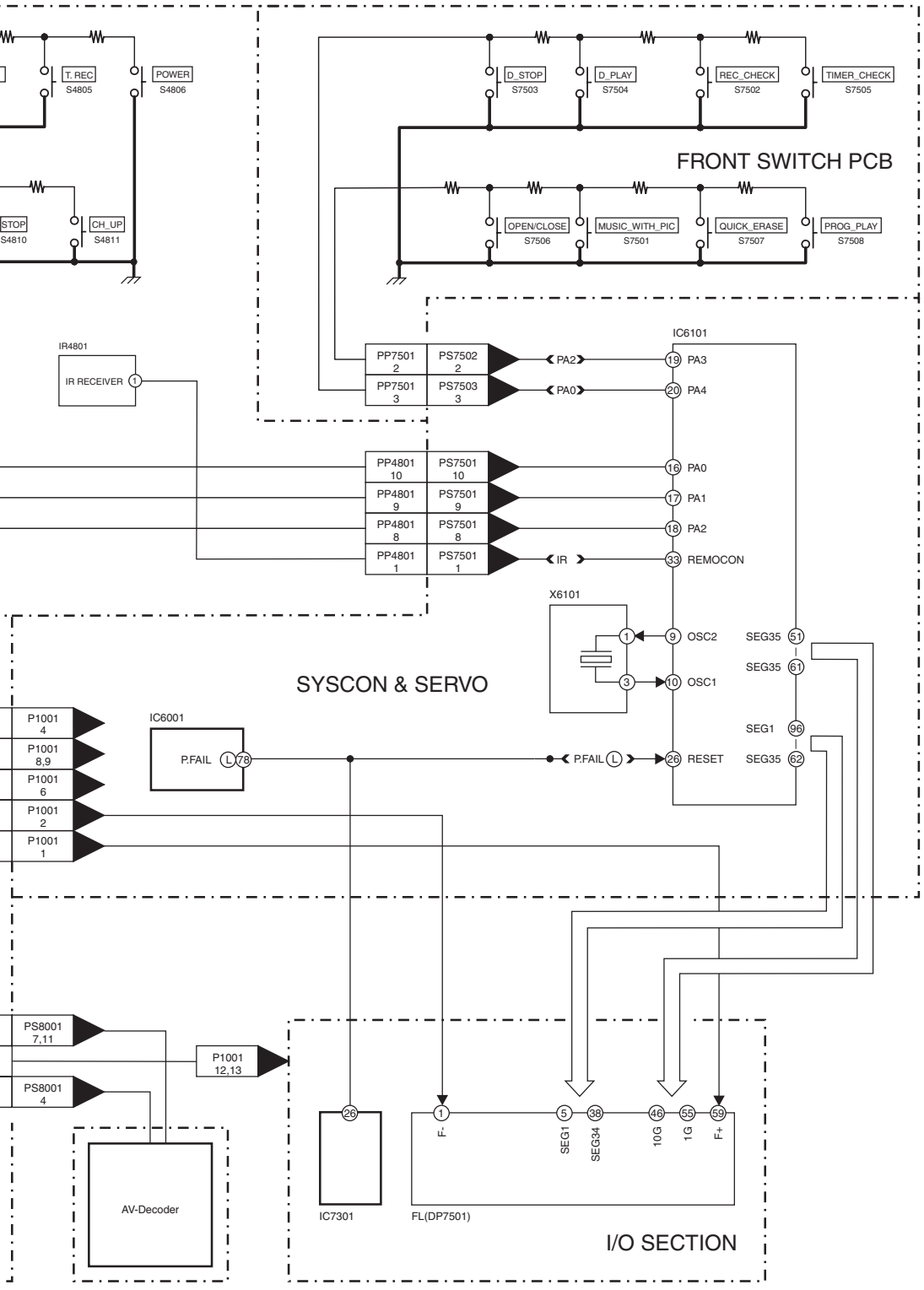
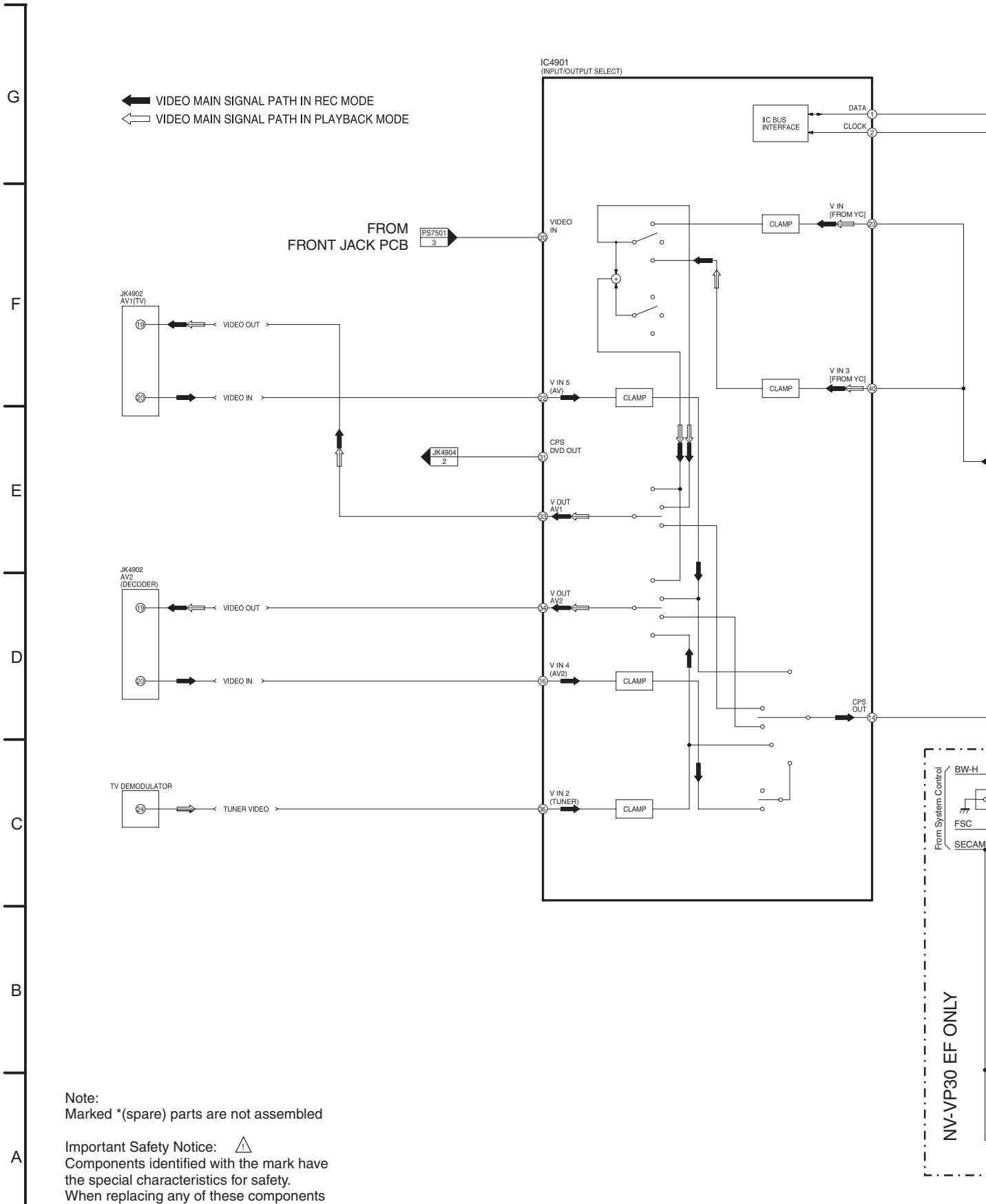


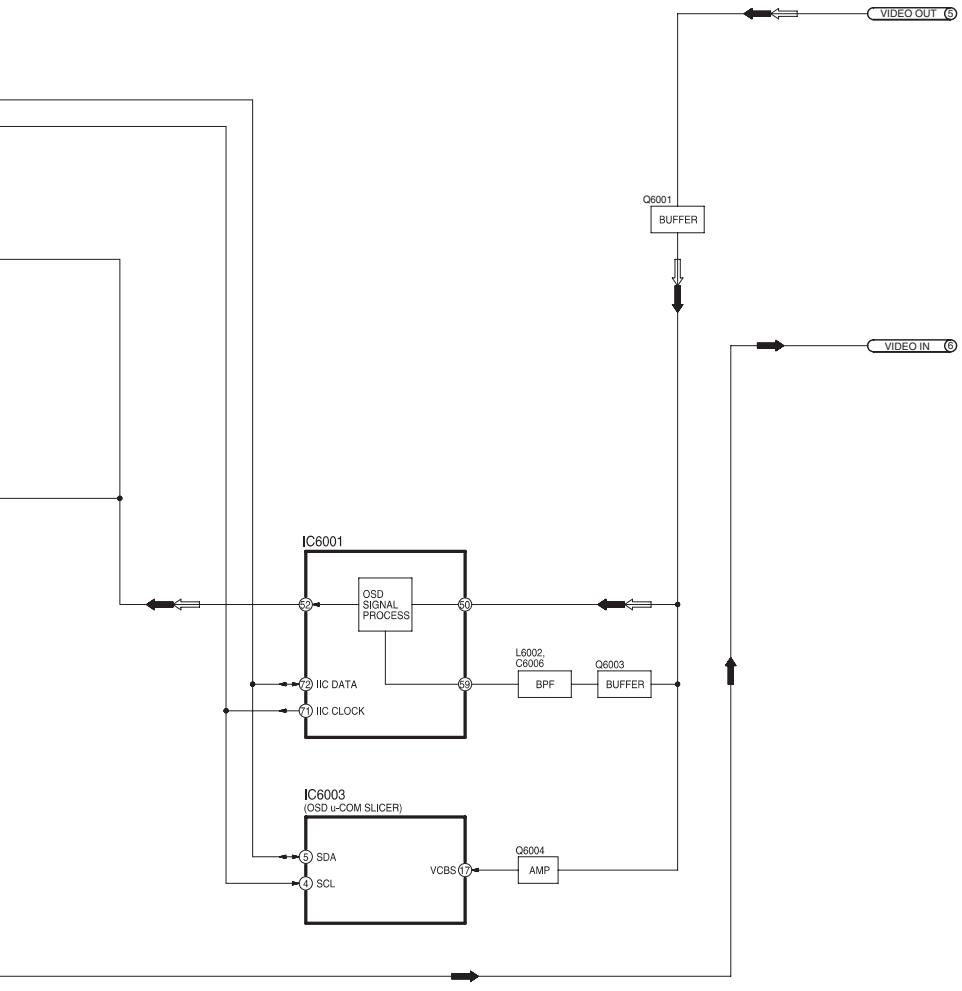
NV-VP25EC
VP30EC/EB/EBL/EP/EF
POWER SUPPLY
BLOCK DIAGRAM

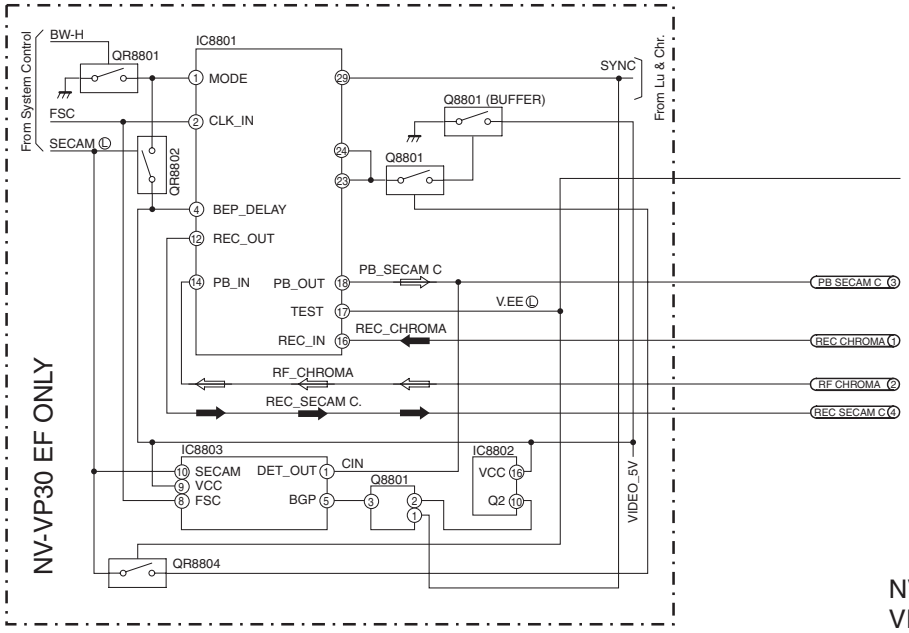
17.2. VCR LUMINANCE & CHROMINANCE BLOCK DIAGRAM



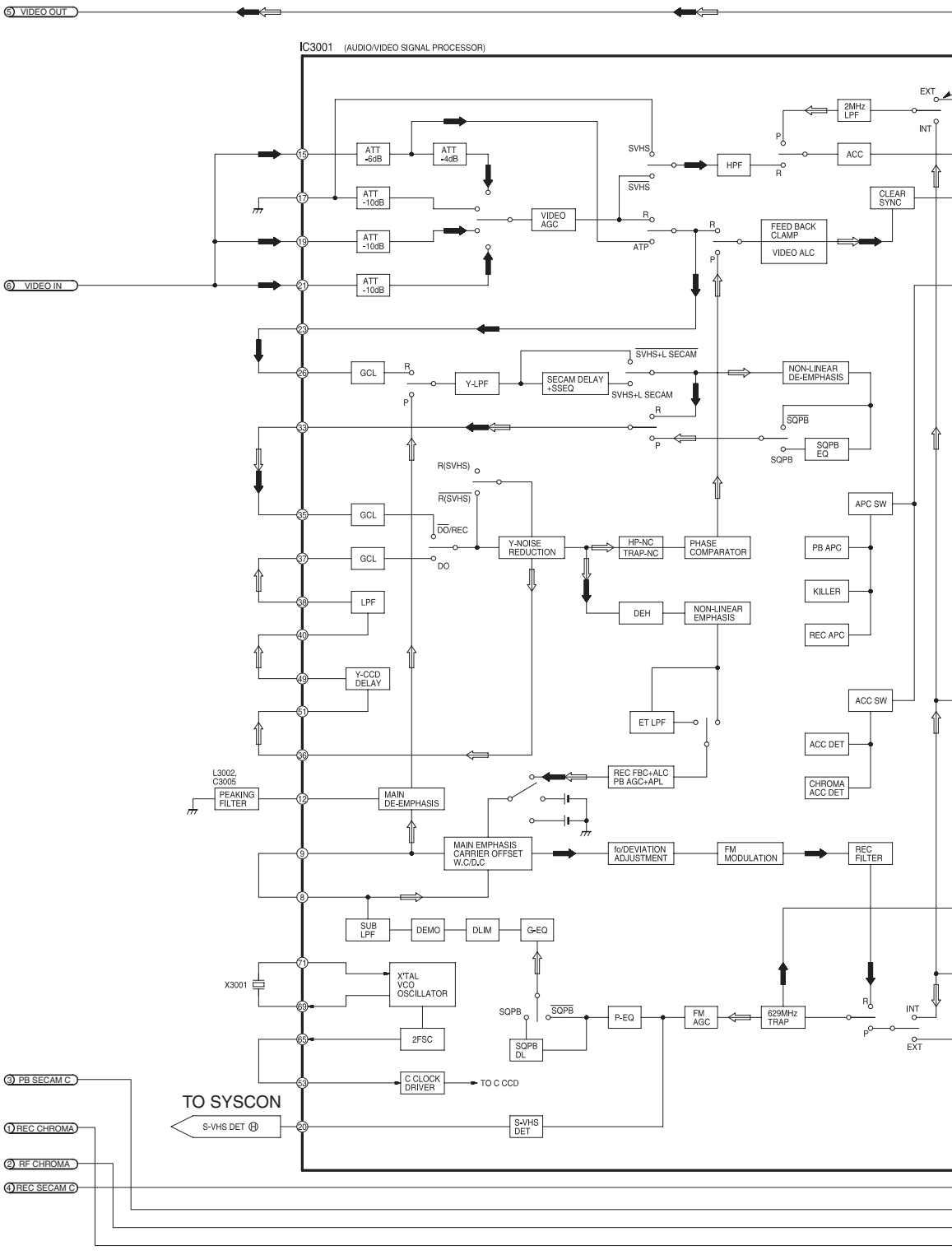
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



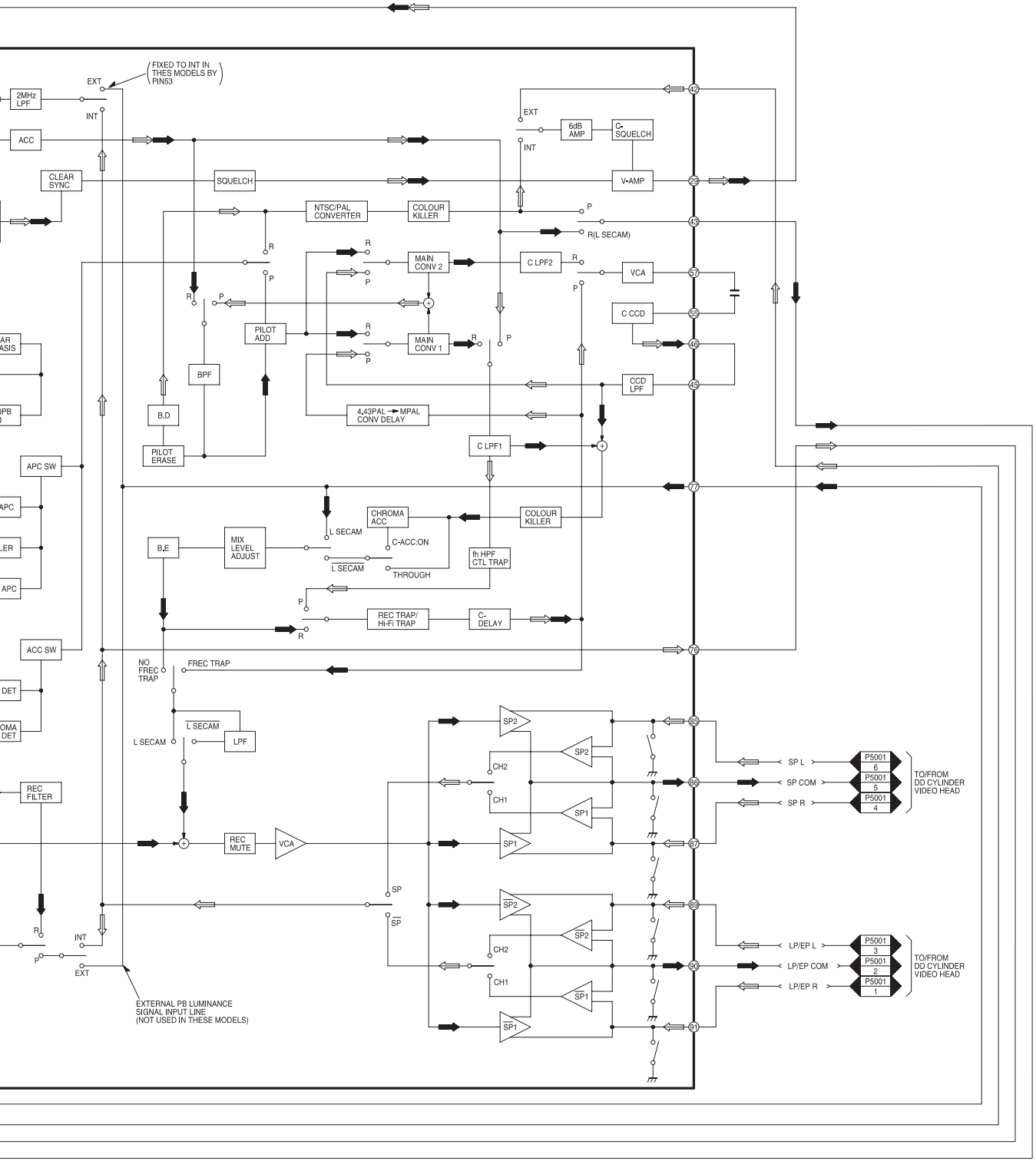


NV-VP25EC
VP30EC/EB/EBL/EP/EF
VCR LUMINANCE & CHROMINANCE 1/2
BLOCK DIAGRAM



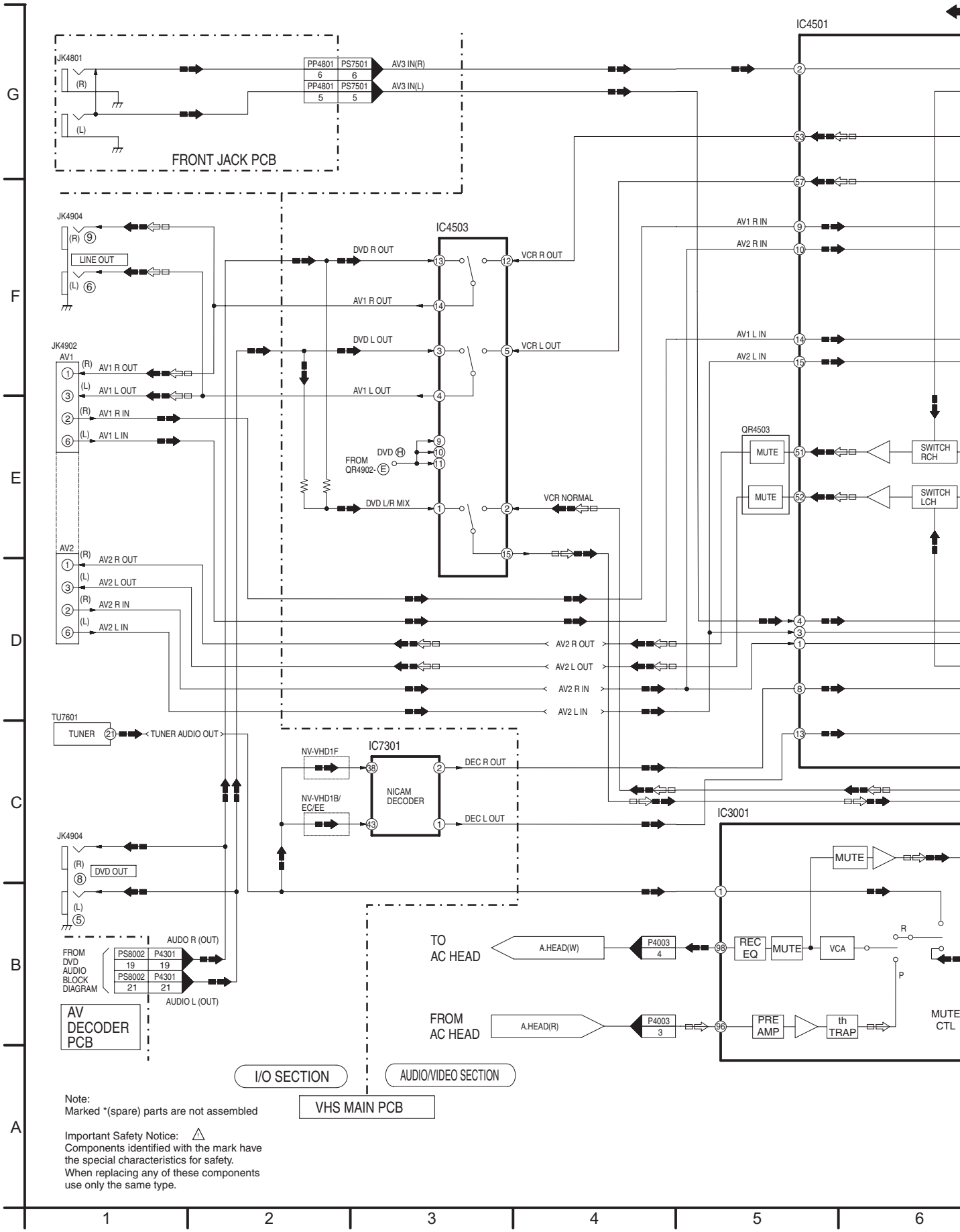
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



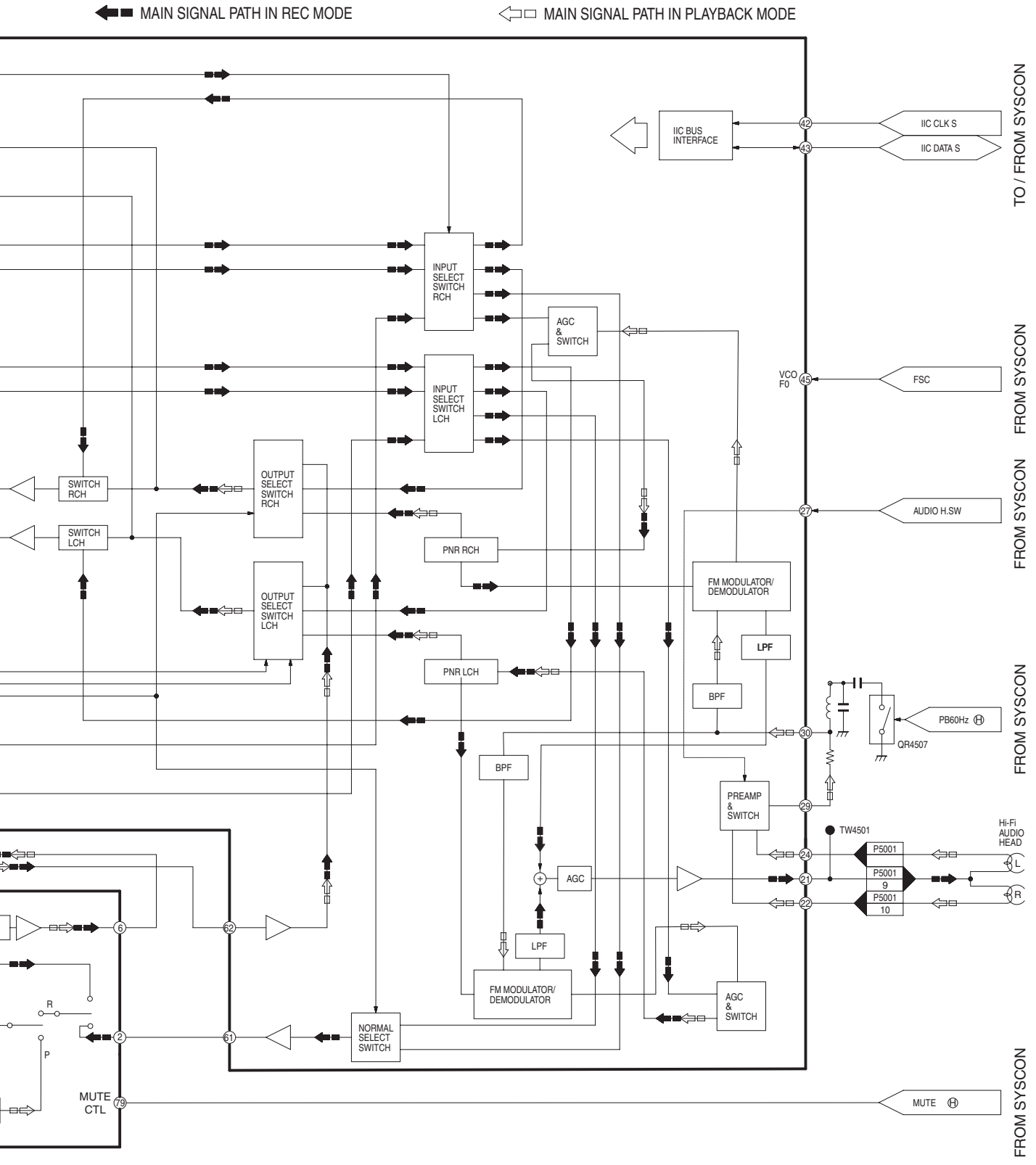
NV-VP25EC
VP30EC/EB/EBL/EP/EF
VCR LUMINANCE & CHROMINANCE 2/2
BLOCK DIAGRAM

17.3. VCR AUDIO BLOCK DIAGRAM



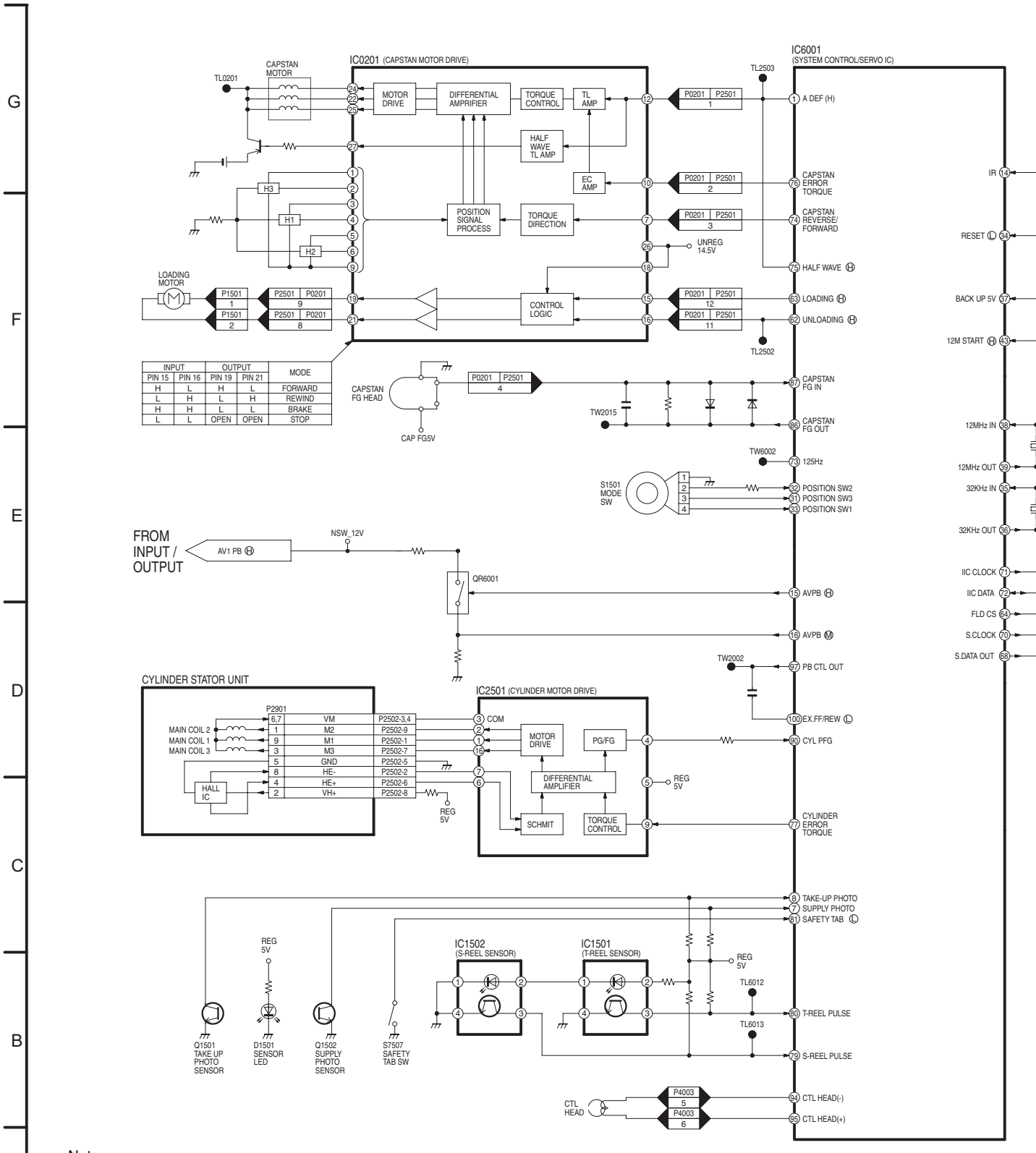
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
VCR AUDIO
BLOCK DIAGRAM

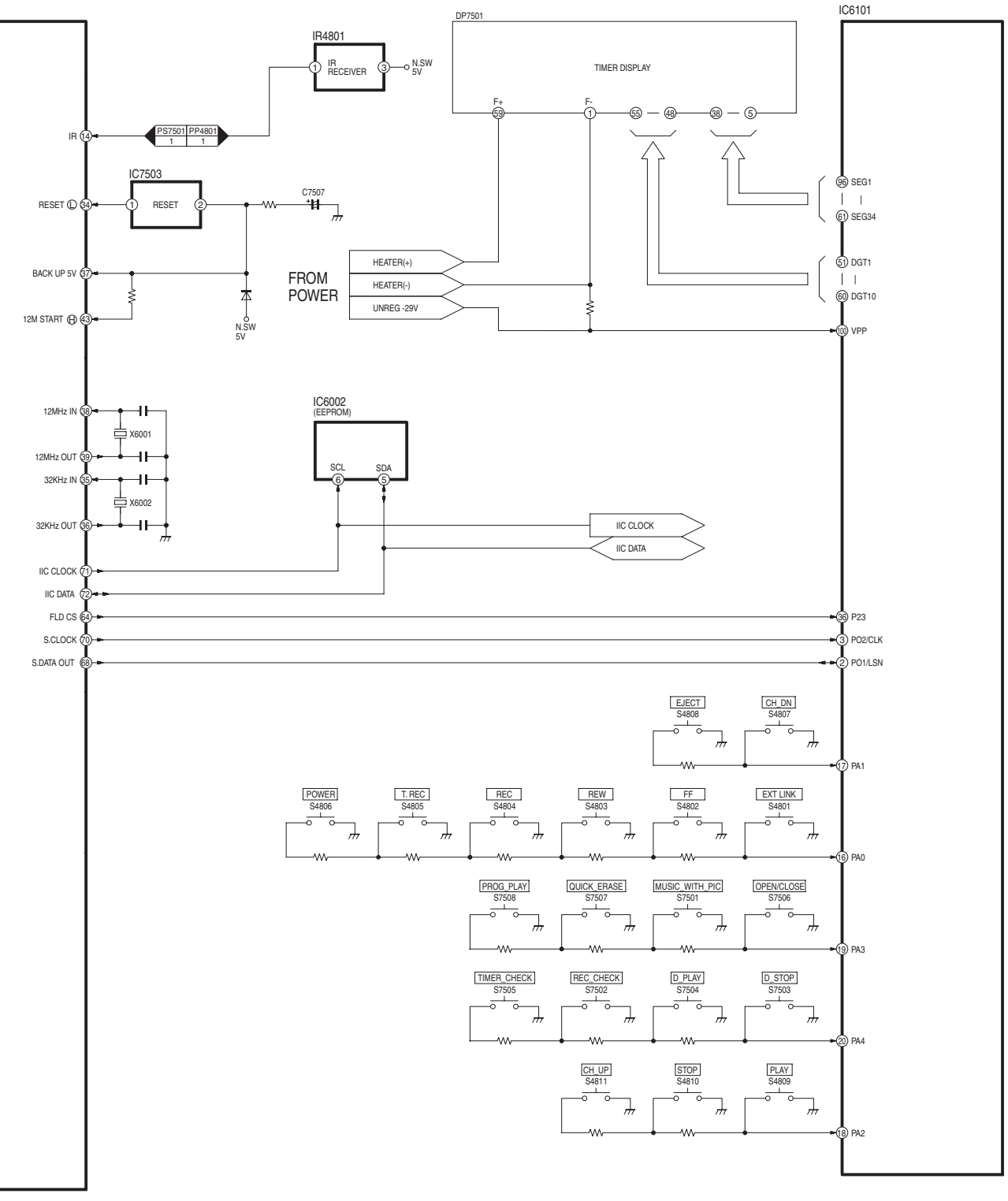
17.4. SYSCON & SERVO BLOCK DIAGRAM



INPUT		OUTPUT		MODE
PIN 15	PIN 16	PIN 19	PIN 21	
H	L	H	L	FORWARD
L	H	L	H	REWIND
H	H	L	L	BRAKE
L	L	OPEN	OPEN	STOP

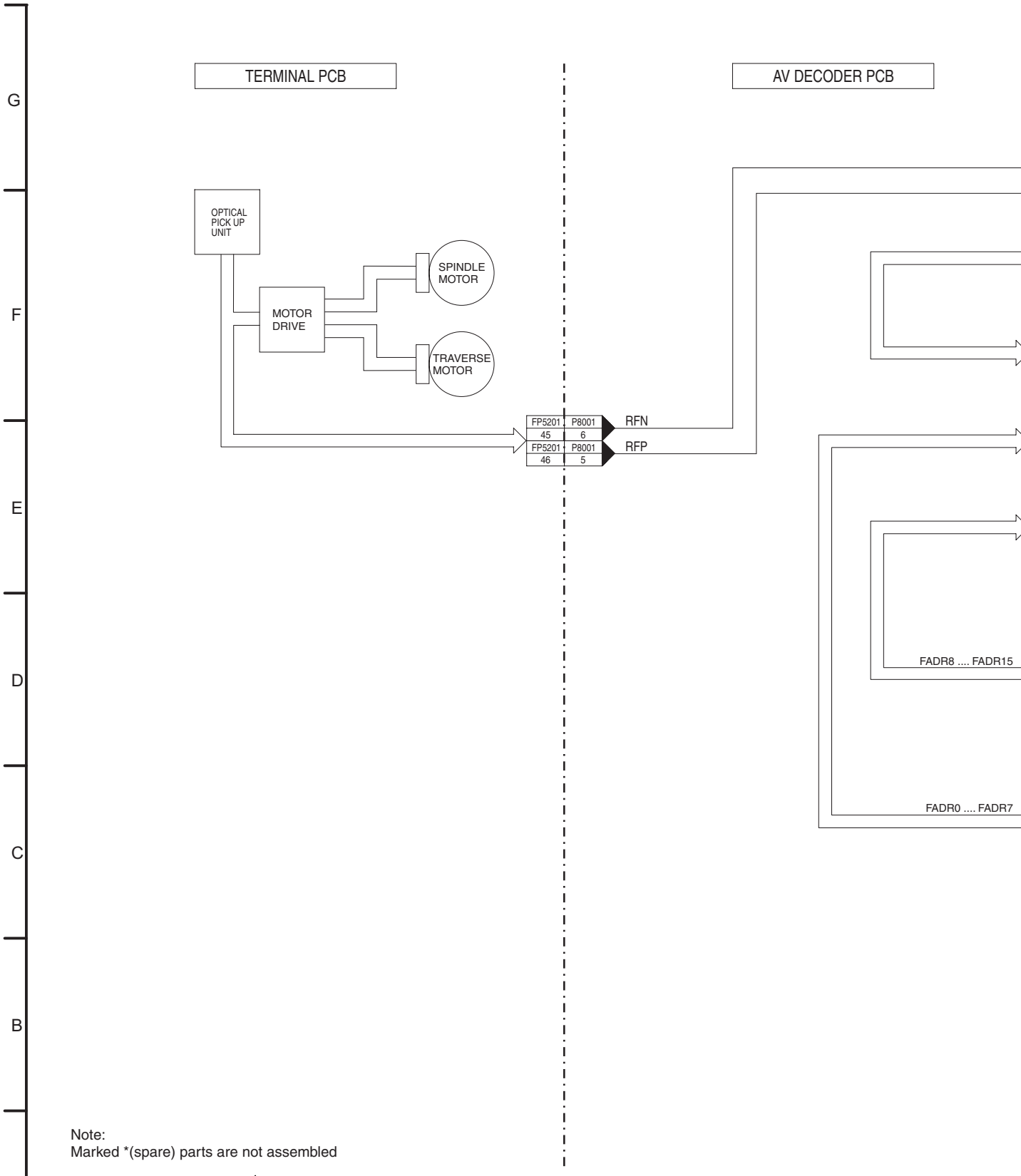
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



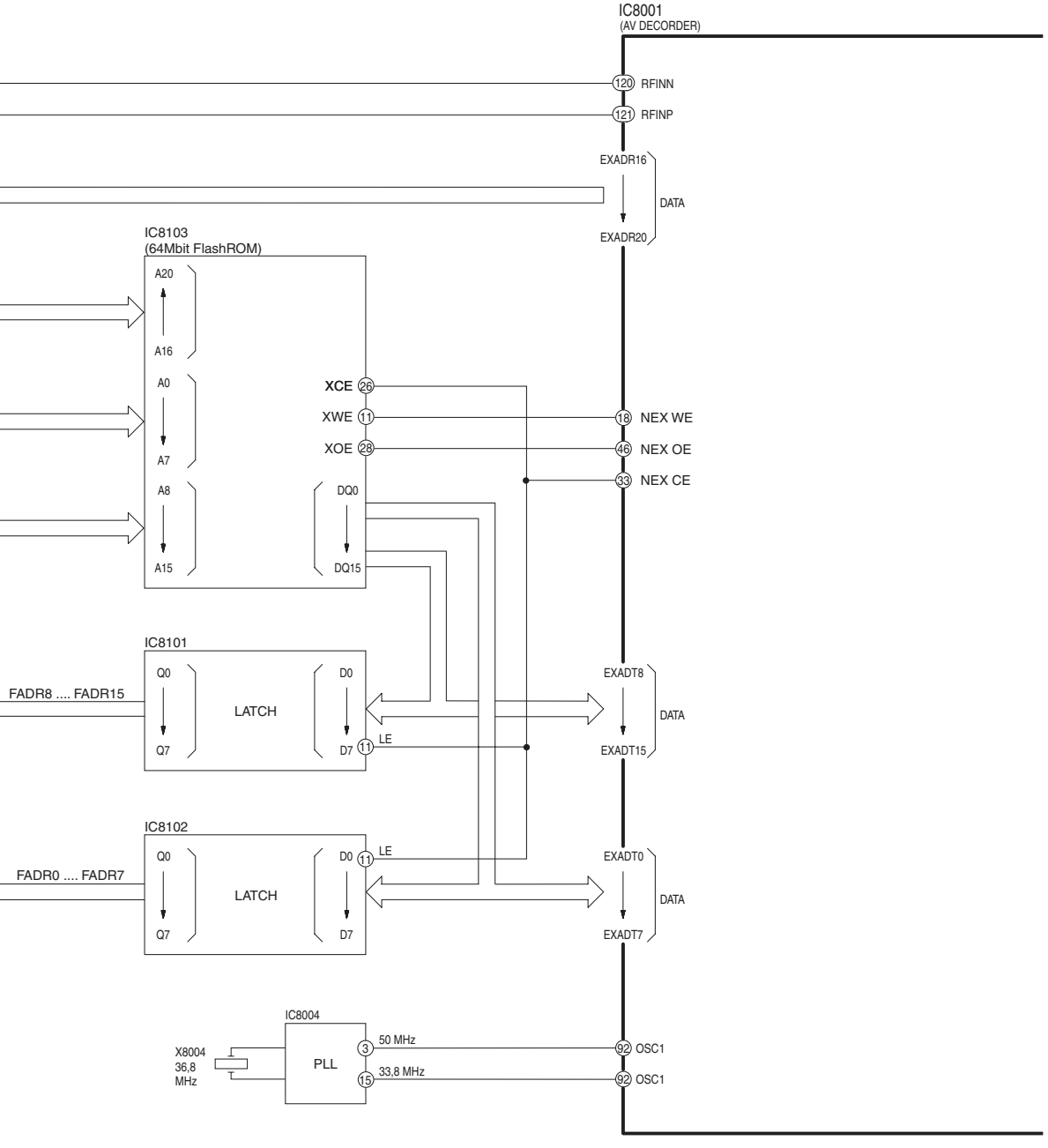
NV-VP25EC
VP30EC/EB/EBL/EP/EF
MAIN PCB - SYSCON & SERVO
BLOCK DIAGRAM

17.5. DVD VIDEO BLOCK DIAGRAM

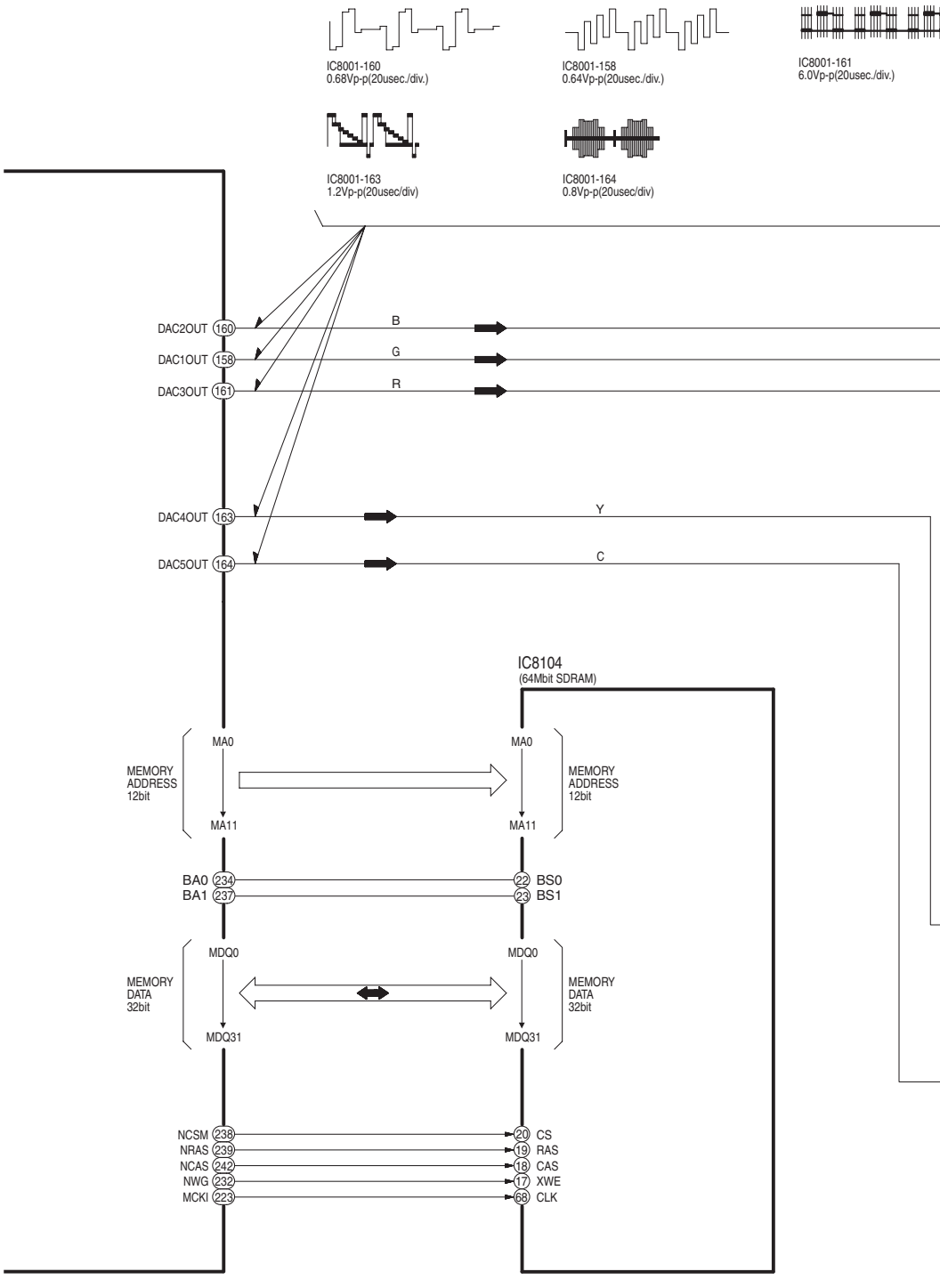


Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.

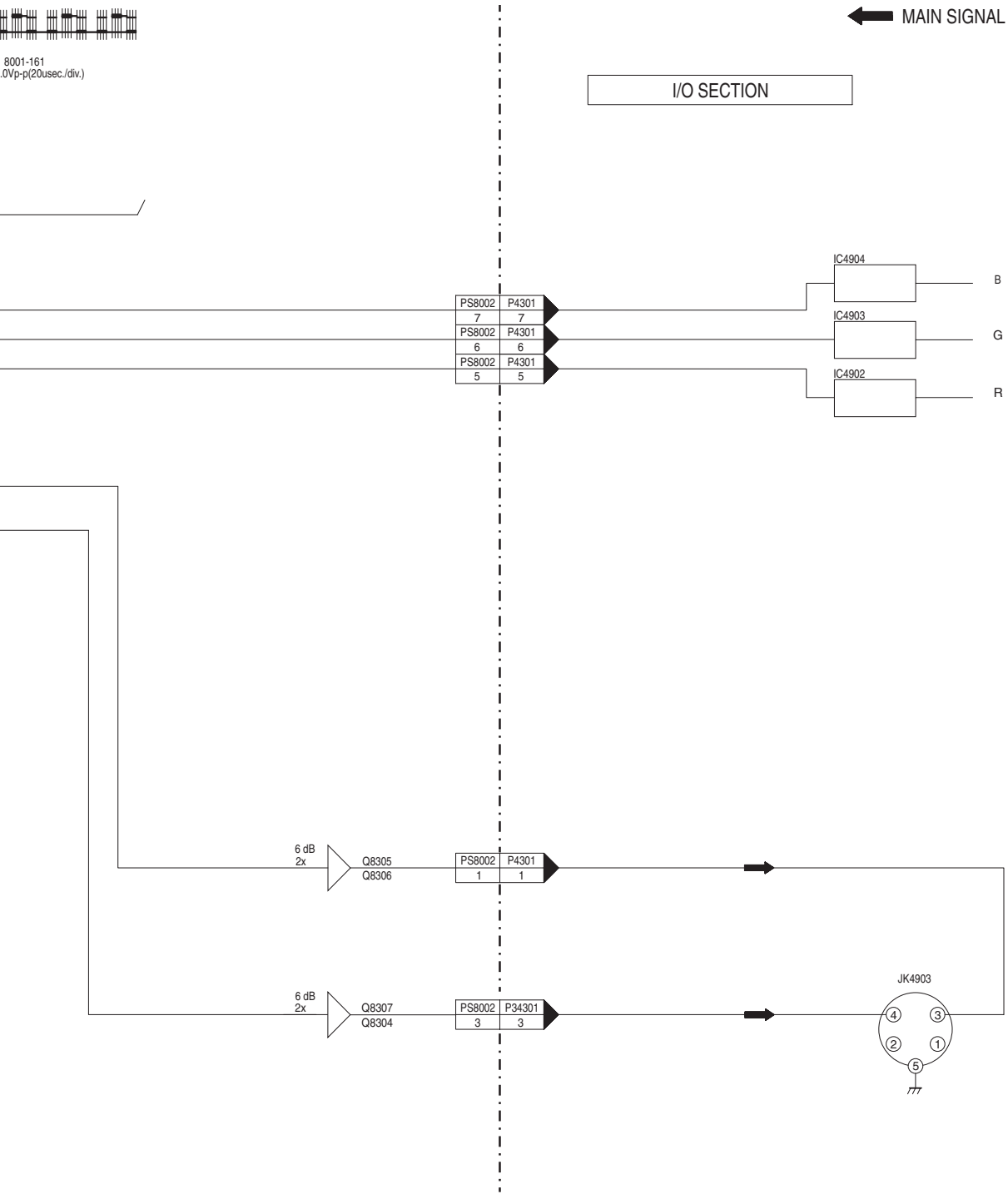


NV-VP25EC
VP30EC/EB/EBL/EP/EF
DVD VIDEO 1/2
BLOCK DIAGRAM



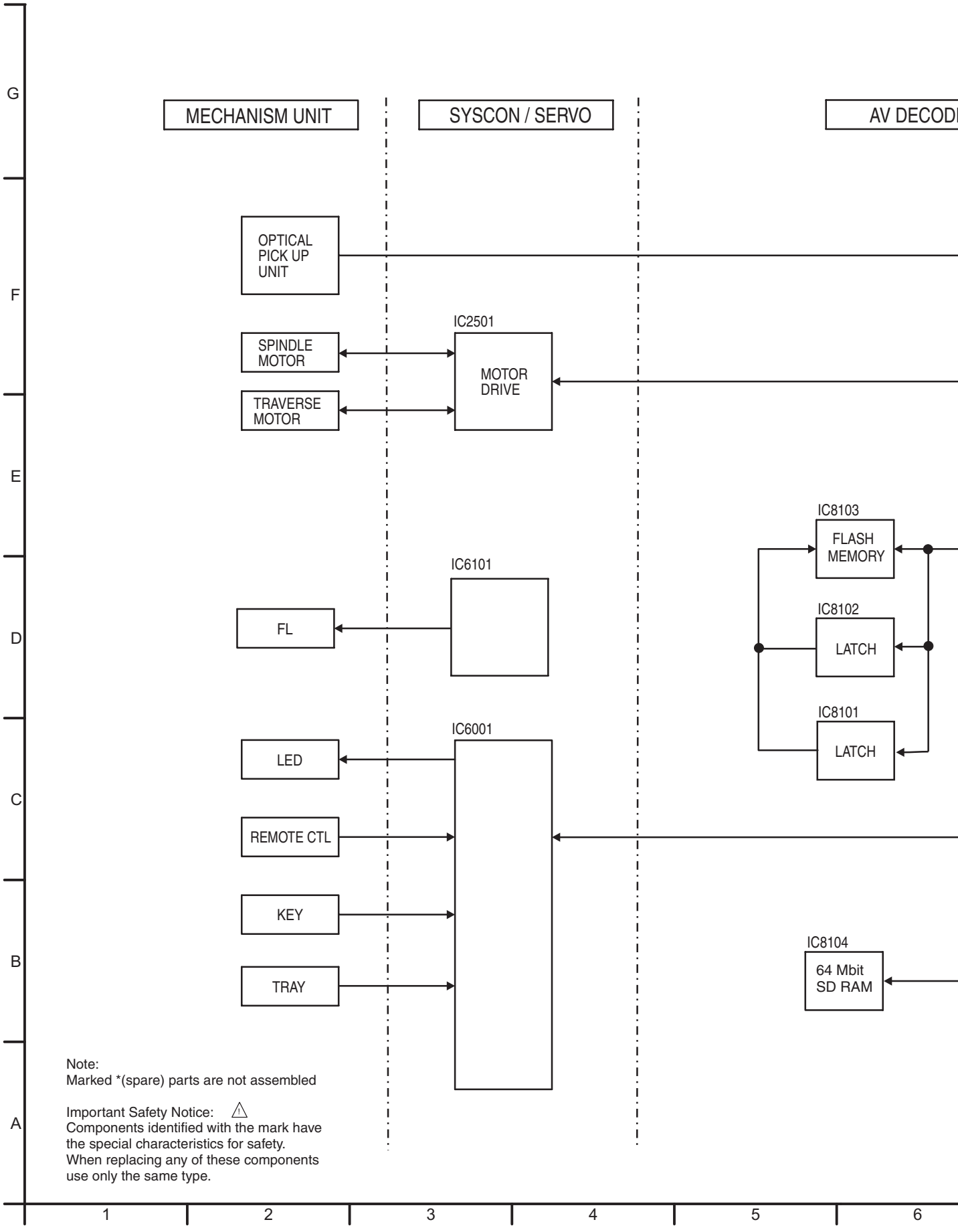
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



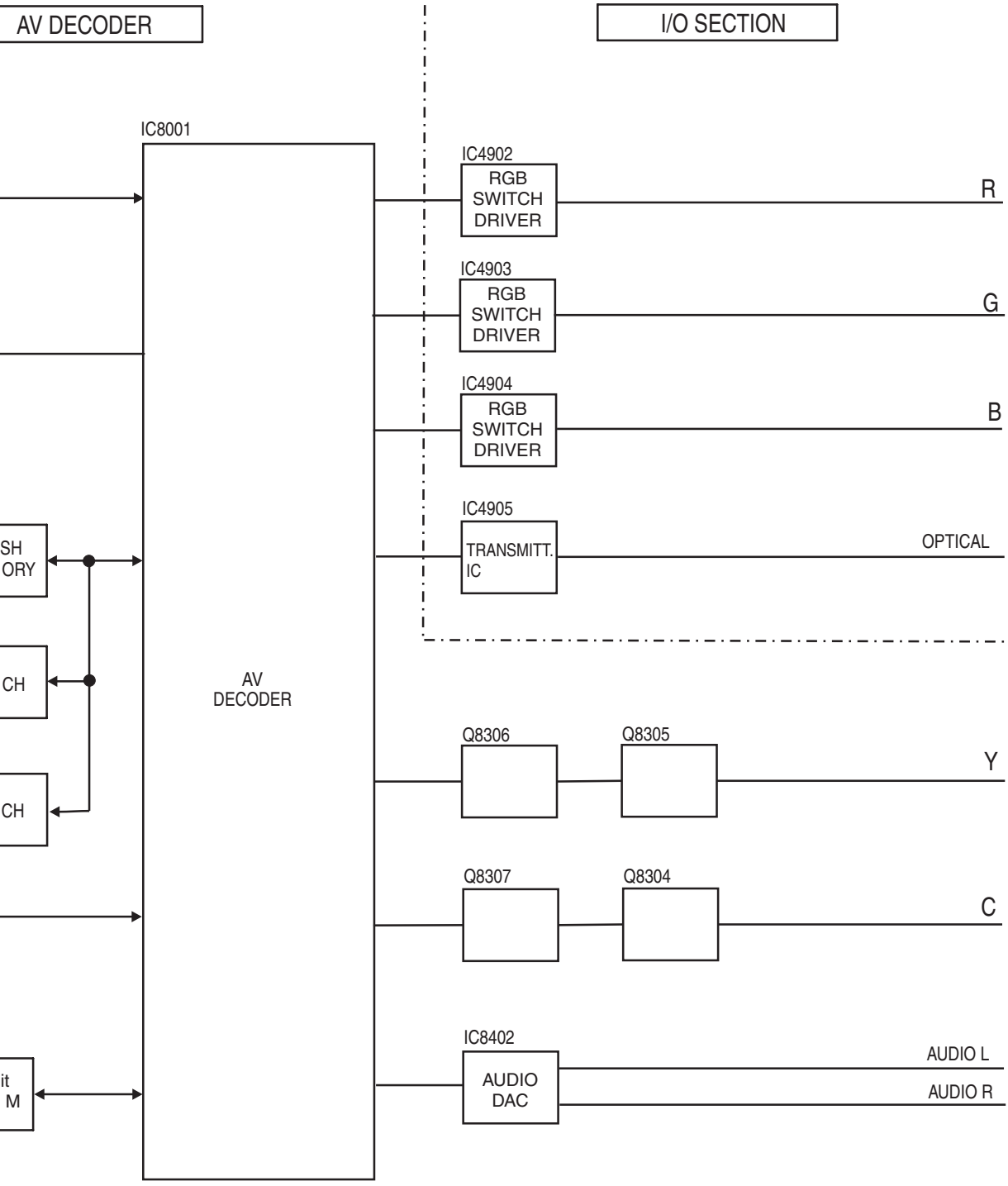
NV-VP25EC
VP30EC/EB/EBL/EP/EF
DVD VIDEO 2/2
BLOCK DIAGRAM

17.6. DVD OVERALL BLOCK DIAGRAM



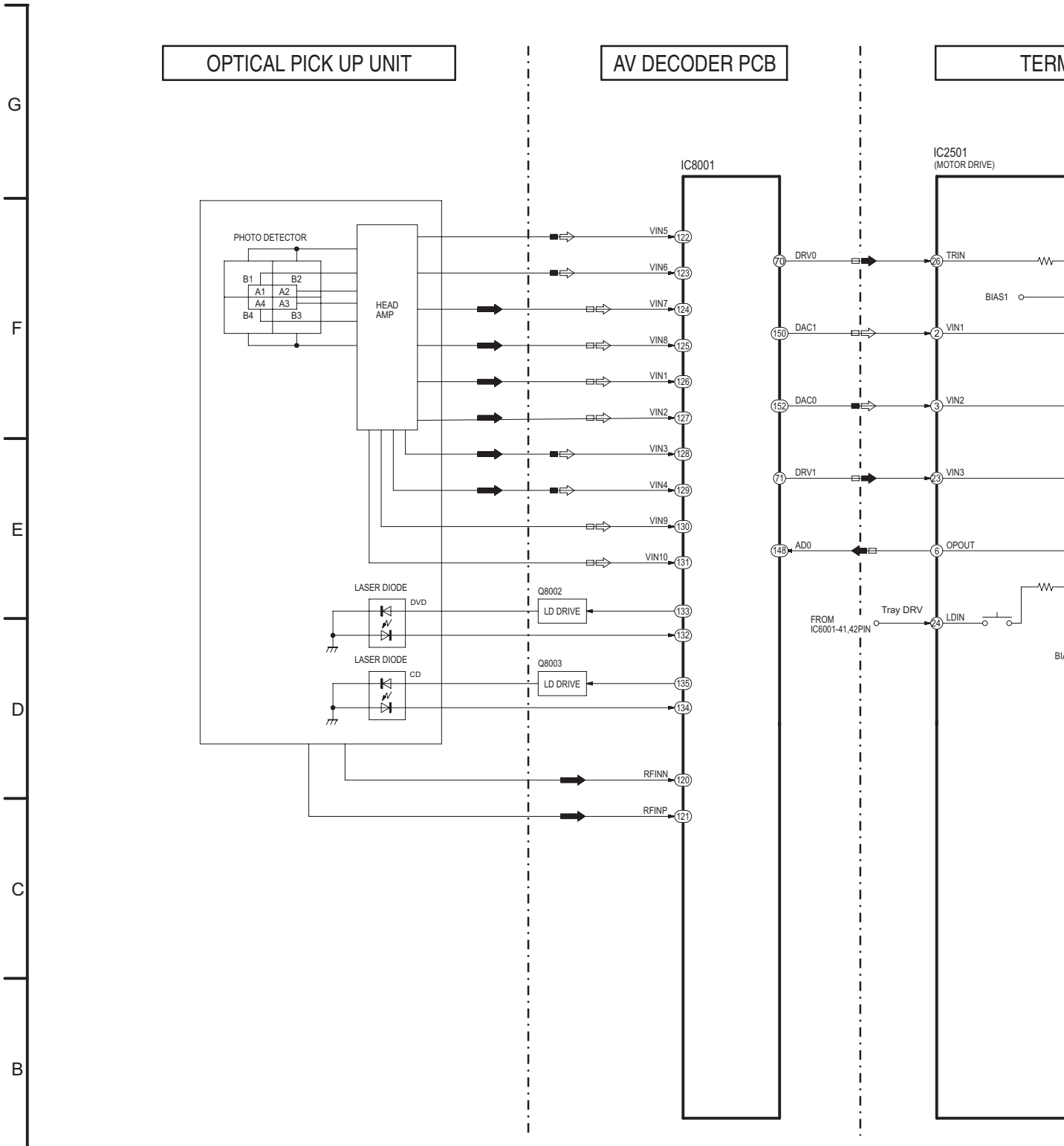
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



NV-VP25EC
VP30EC/EB/EBL/EP/EF
DVD OVERALL
BLOCK DIAGRAM

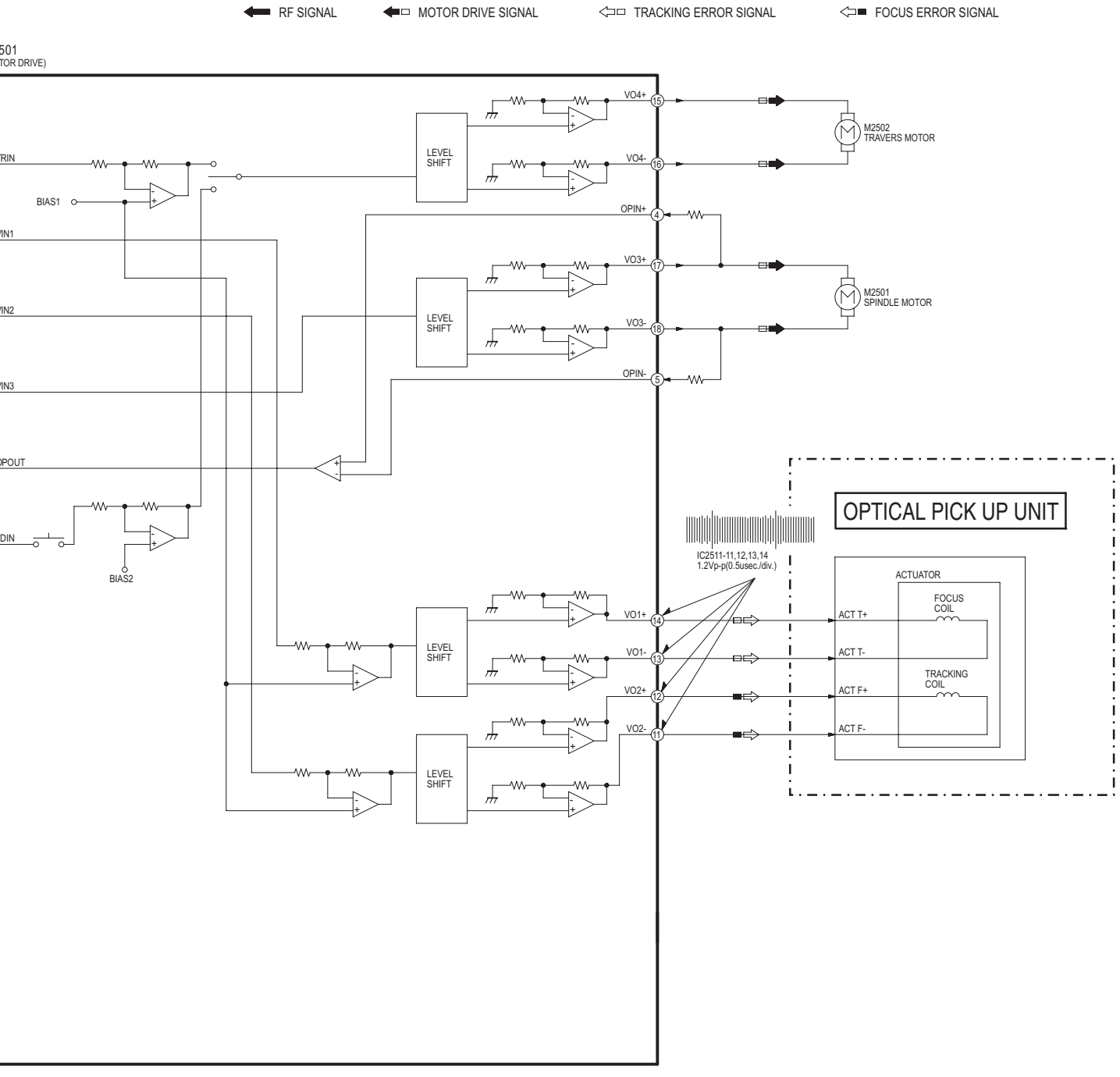
17.7. DVD SERVO BLOCK DIAGRAM



Note:
Marked *(spare) parts are not assembled

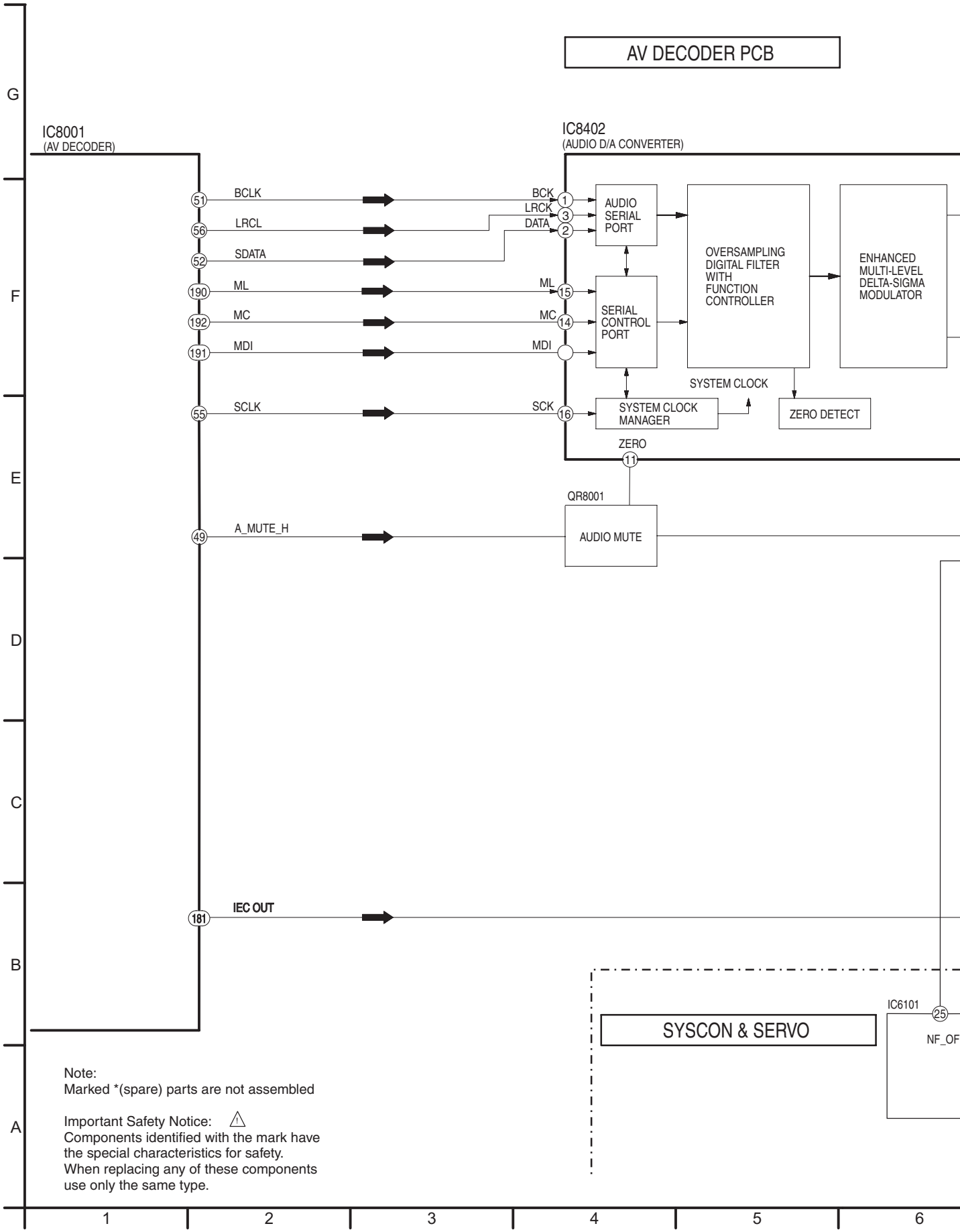
Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.

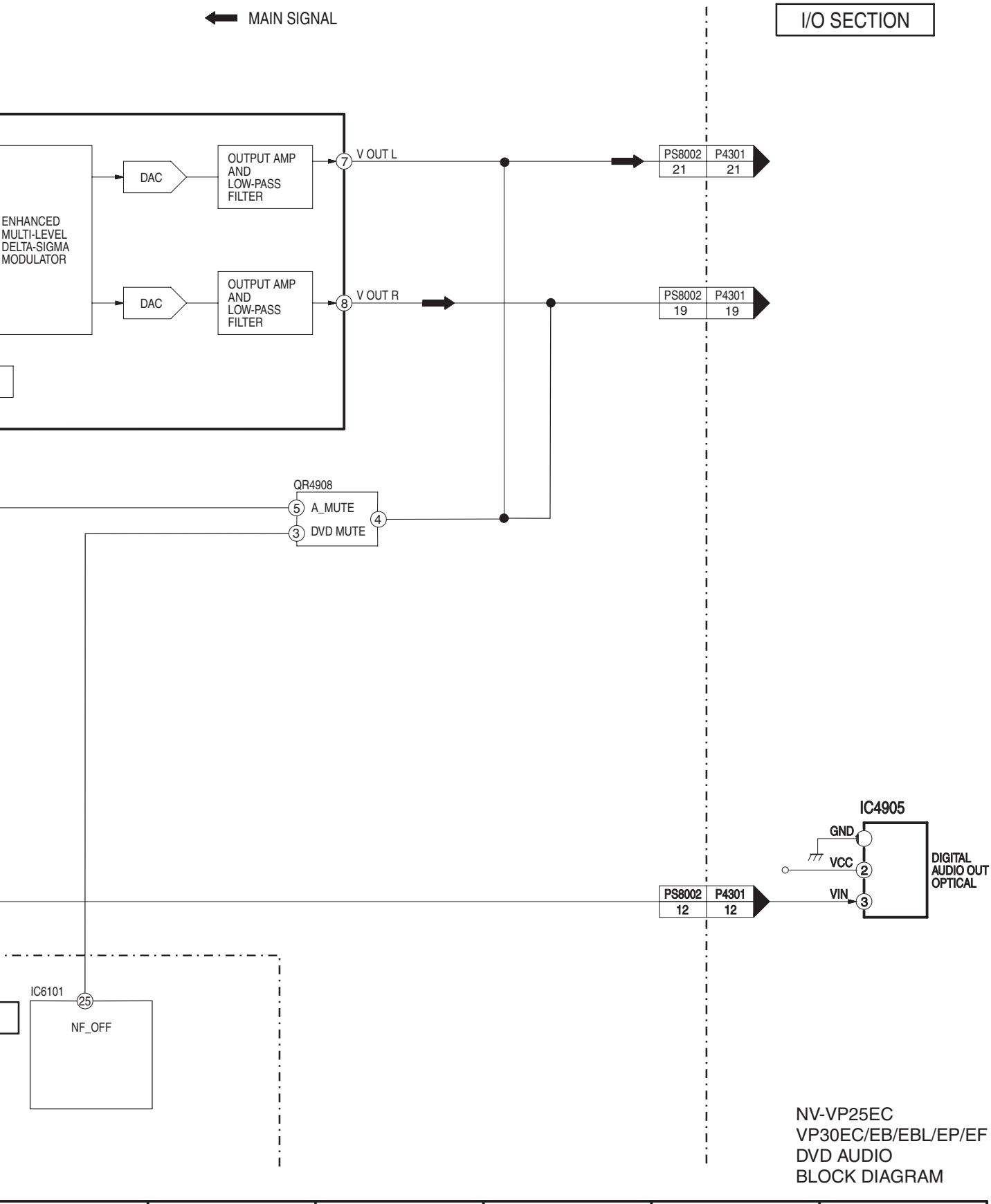
TERMINAL PCB



NV-VP25EC
VP30EC/EB/EBL/EP/EF
SERVO SECTION
BLOCK DIAGRAM

17.8. DVD AUDIO BLOCK DIAGRAM



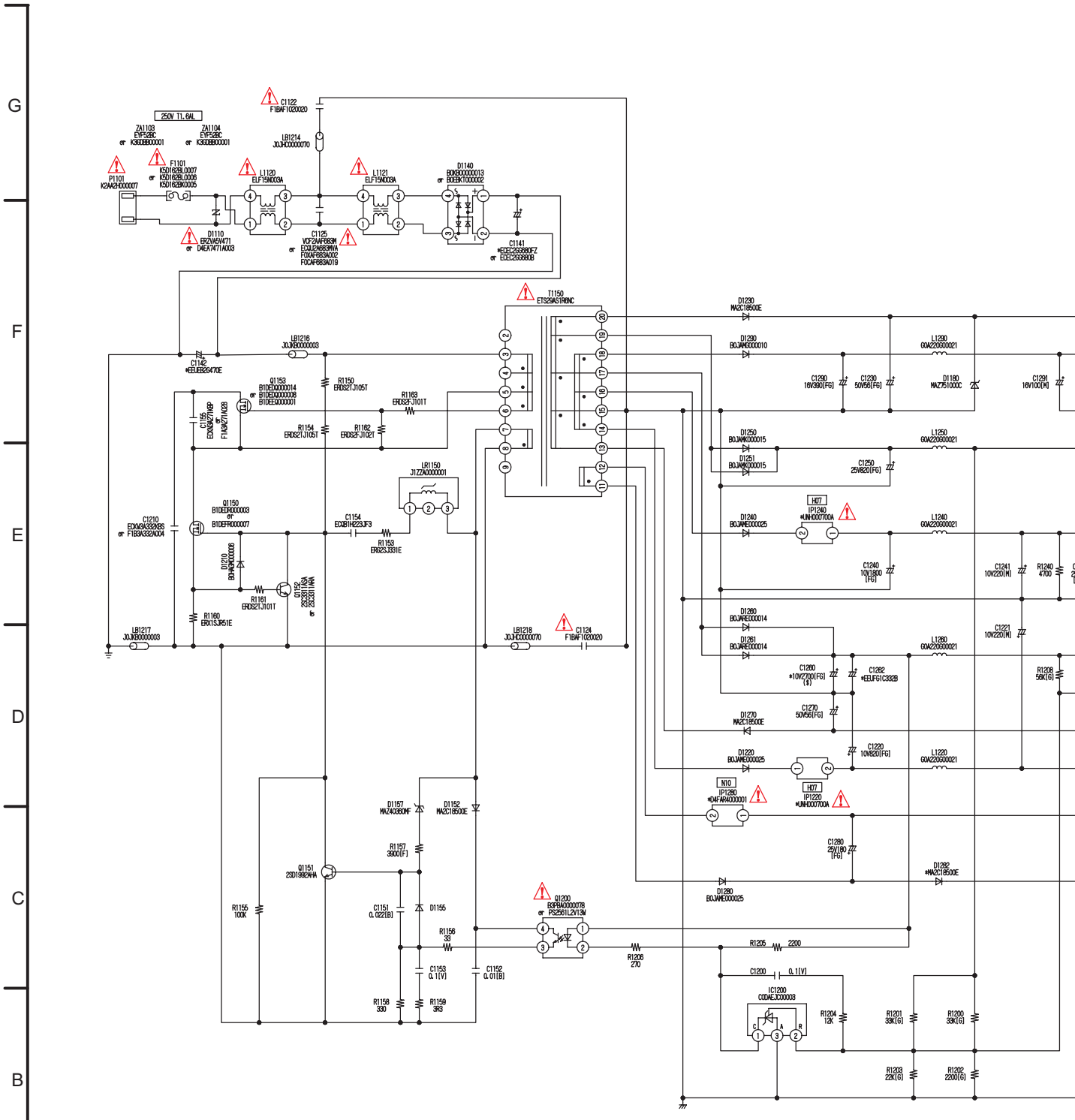


NV-VP25EC
VP30EC/EB/EBL/EP/EF
DVD AUDIO
BLOCK DIAGRAM

6 7 8 9 10 11

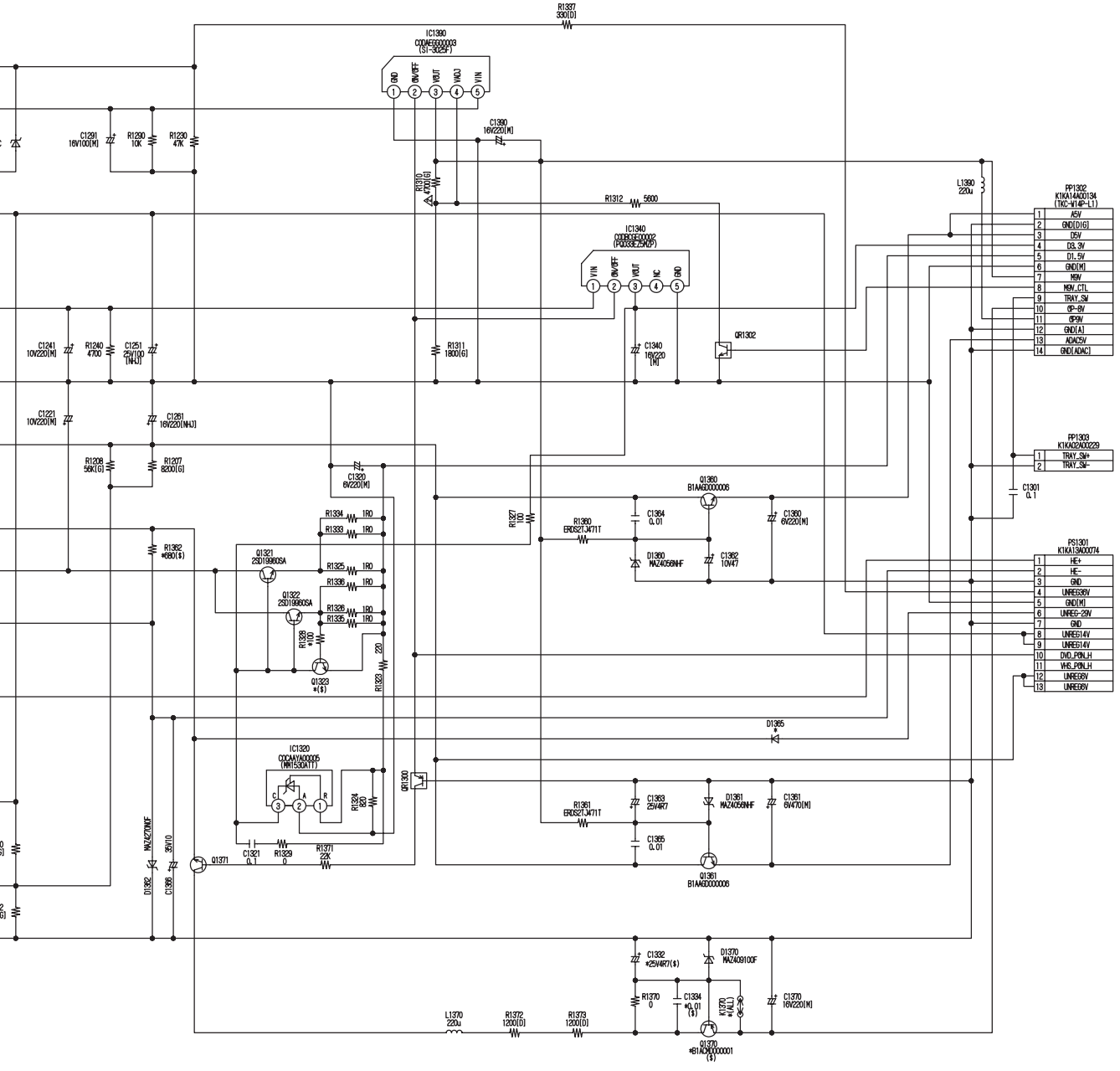
18 SCHEMATIC DIAGRAM

18.1. POWER PCB



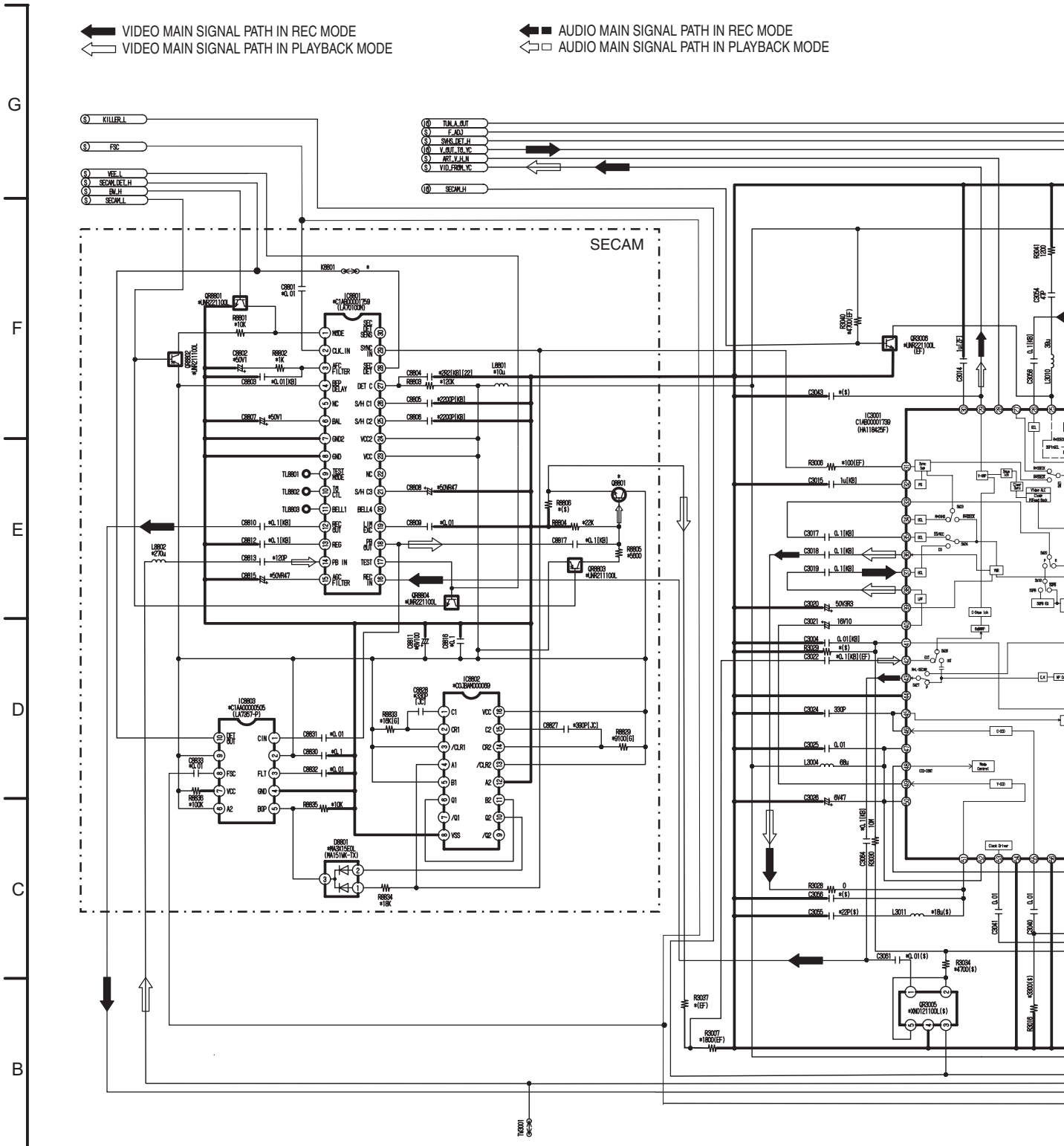
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



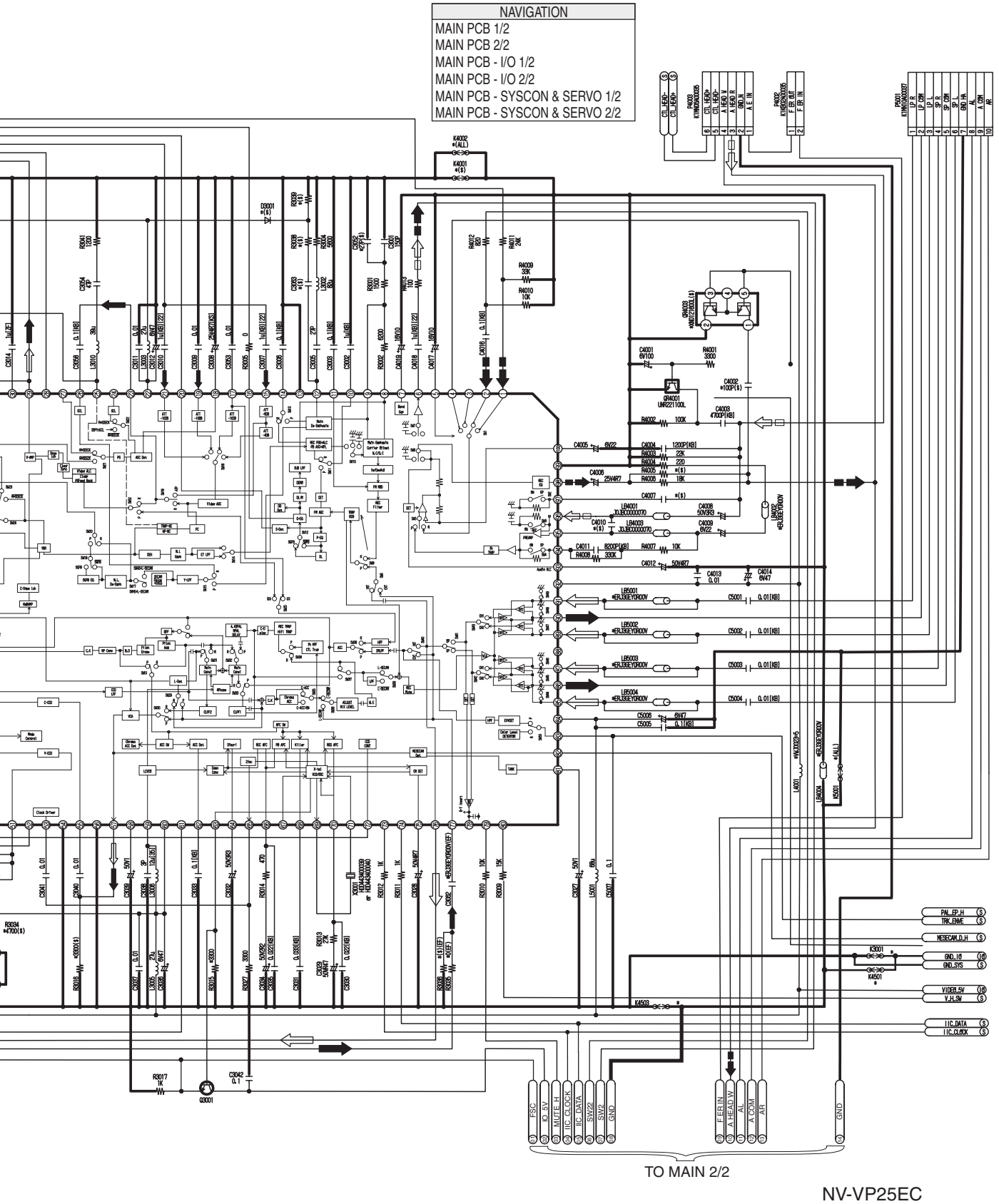
NV-VP25EC
VP30EC/EB/EBL/EP/EF
POWER PCB
SCHEMATIC DIAGRAM

18.2. MAIN PCB



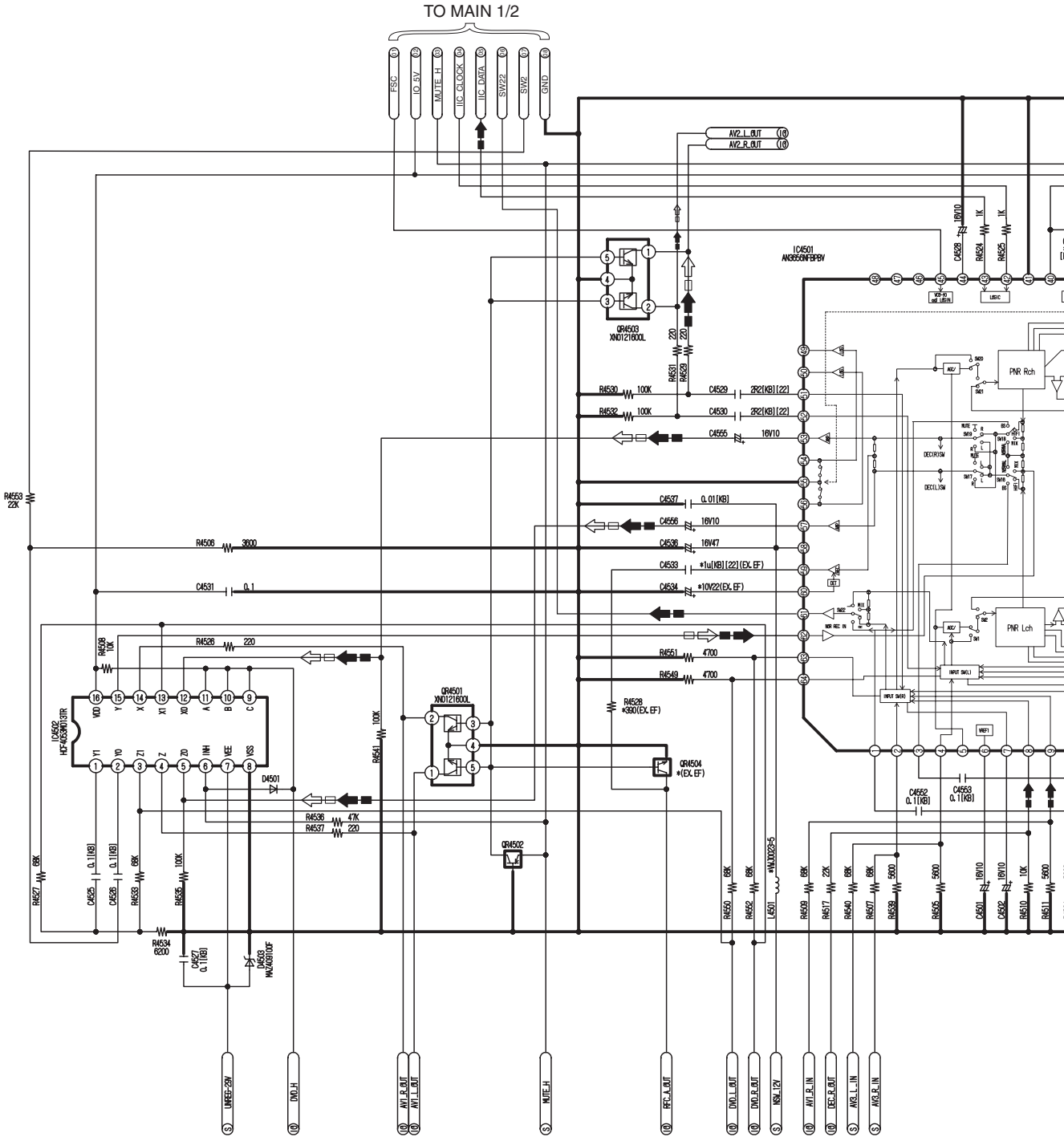
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



NV-VP25EC
VP30EC/EB/EBL/EP/EF
MAIN PCB 1/2
SCHEMATIC DIAGRAM

AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
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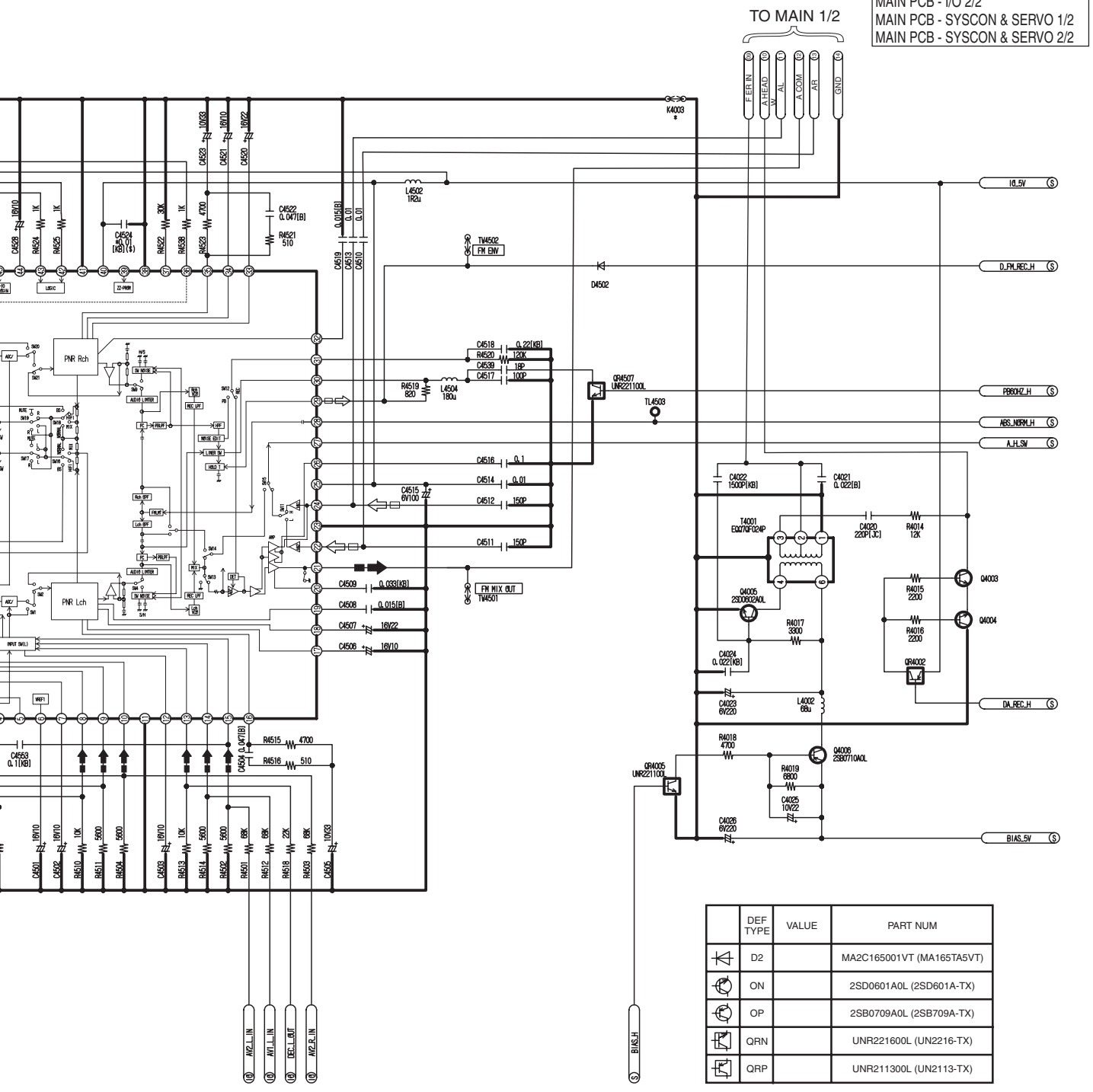
When replacing any of these components use only the same type.

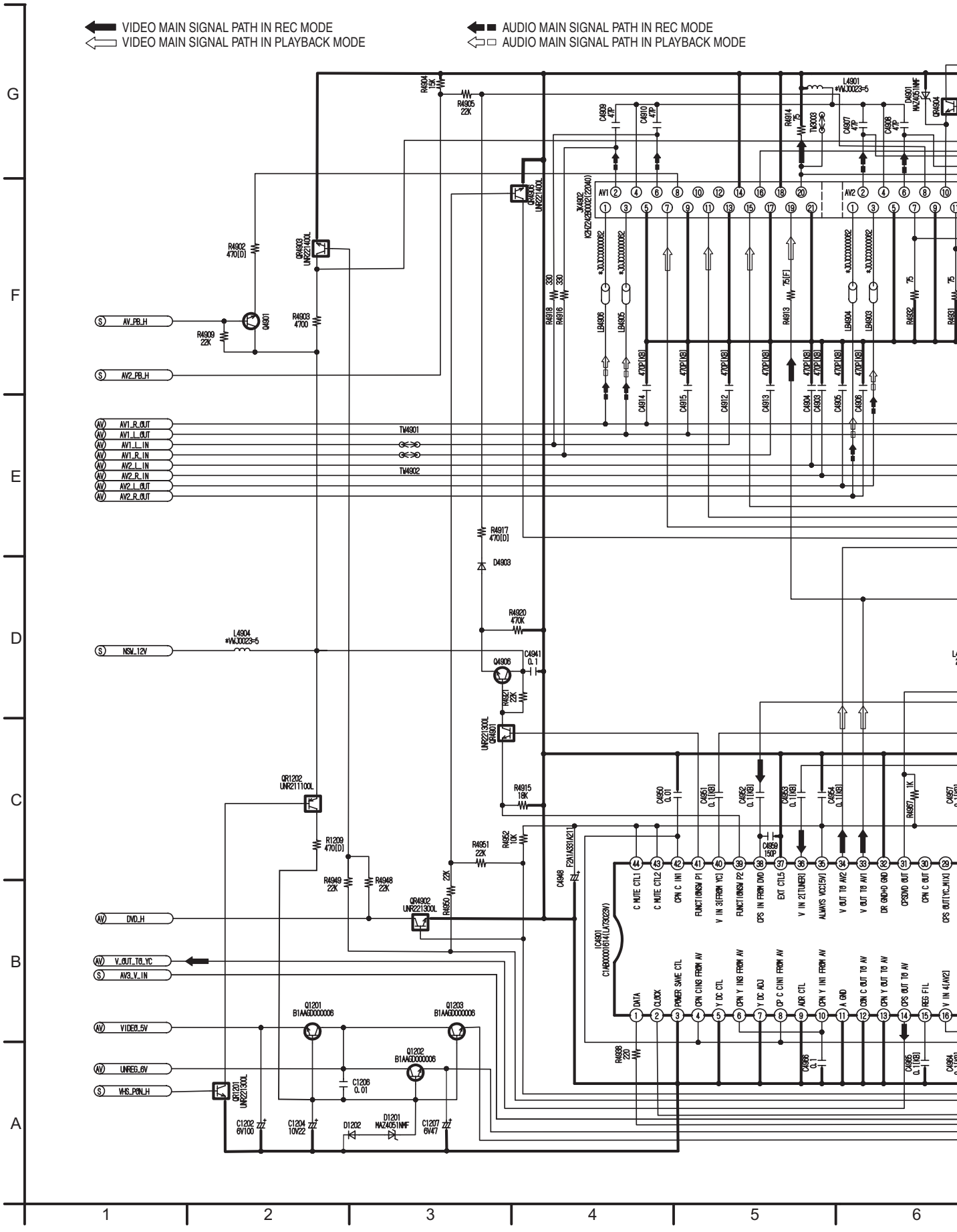
NAVIGATION
MAIN PCB 1/2
MAIN PCB 2/2
MAIN PCB - I/O 1/2
MAIN PCB - I/O 2/2
MAIN PCB - SYSCON & SERVO 1/2
MAIN PCB - SYSCON & SERVO 2/2



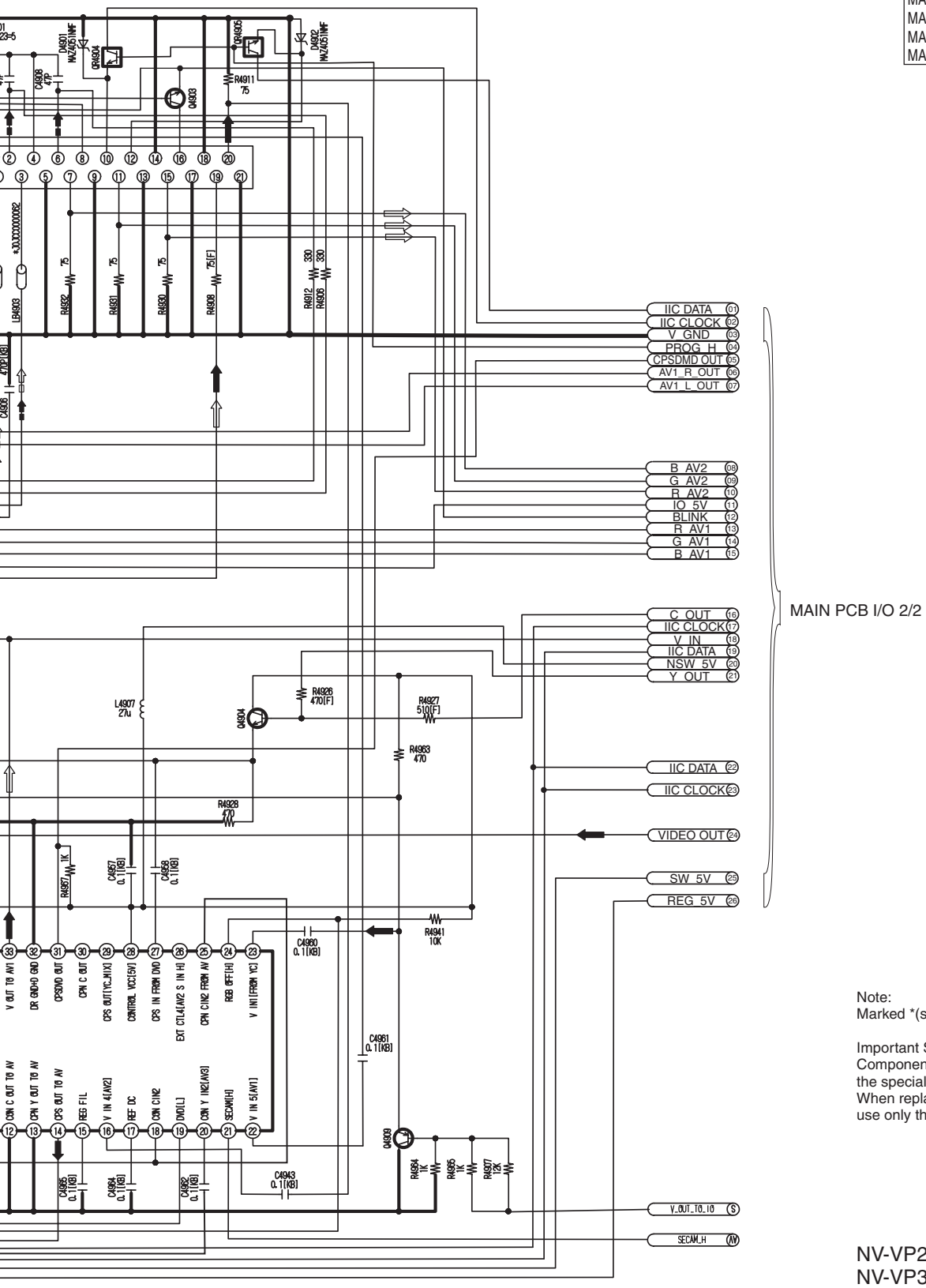
	DEF TYPE	VALUE	PART NUM
	D2		MA2C165001VT (MA165TA5VT)
	ON		2SD0601A0L (2SD601A-TX)
	OP		2SB0709A0L (2SB709A-TX)
	QRN		UNR221600L (UN2216-TX)
	QRP		UNR211300L (UN2113-TX)

NV-VP25EC
VP30EC/EB/EBL/EP/EF
MAIN PCB 2/2
SCHEMATIC DIAGRAM

18.3. MAIN PCB - I/O SECTION



NAVIGATION
MAIN PCB 1/2
MAIN PCB 2/2
MAIN PCB - I/O 1/2
MAIN PCB - I/O 2/2
MAIN PCB - SYSCON & SERVO 1/2
MAIN PCB - SYSCON & SERVO 2/2



Note:
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Important Safety Notice: ⚠
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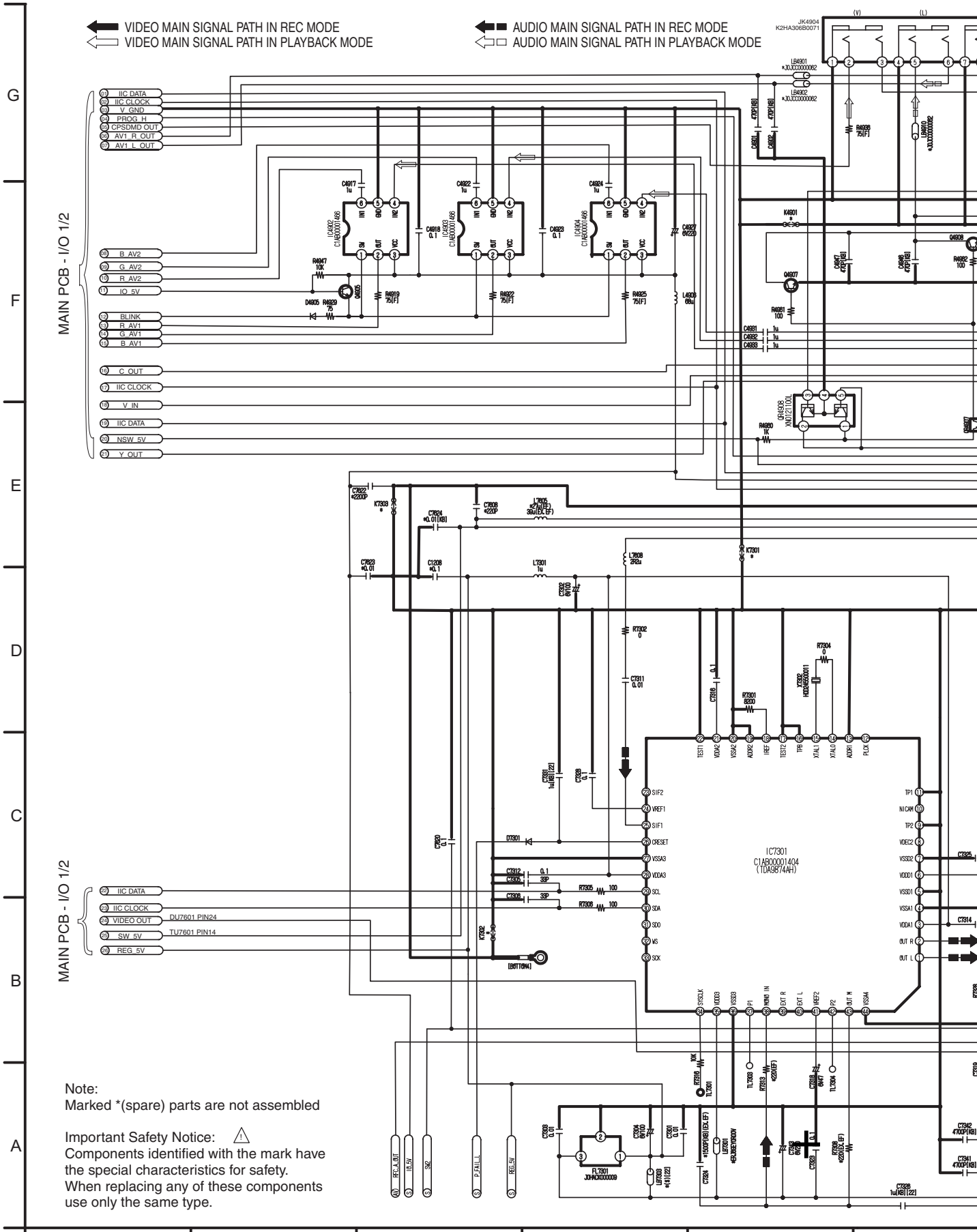
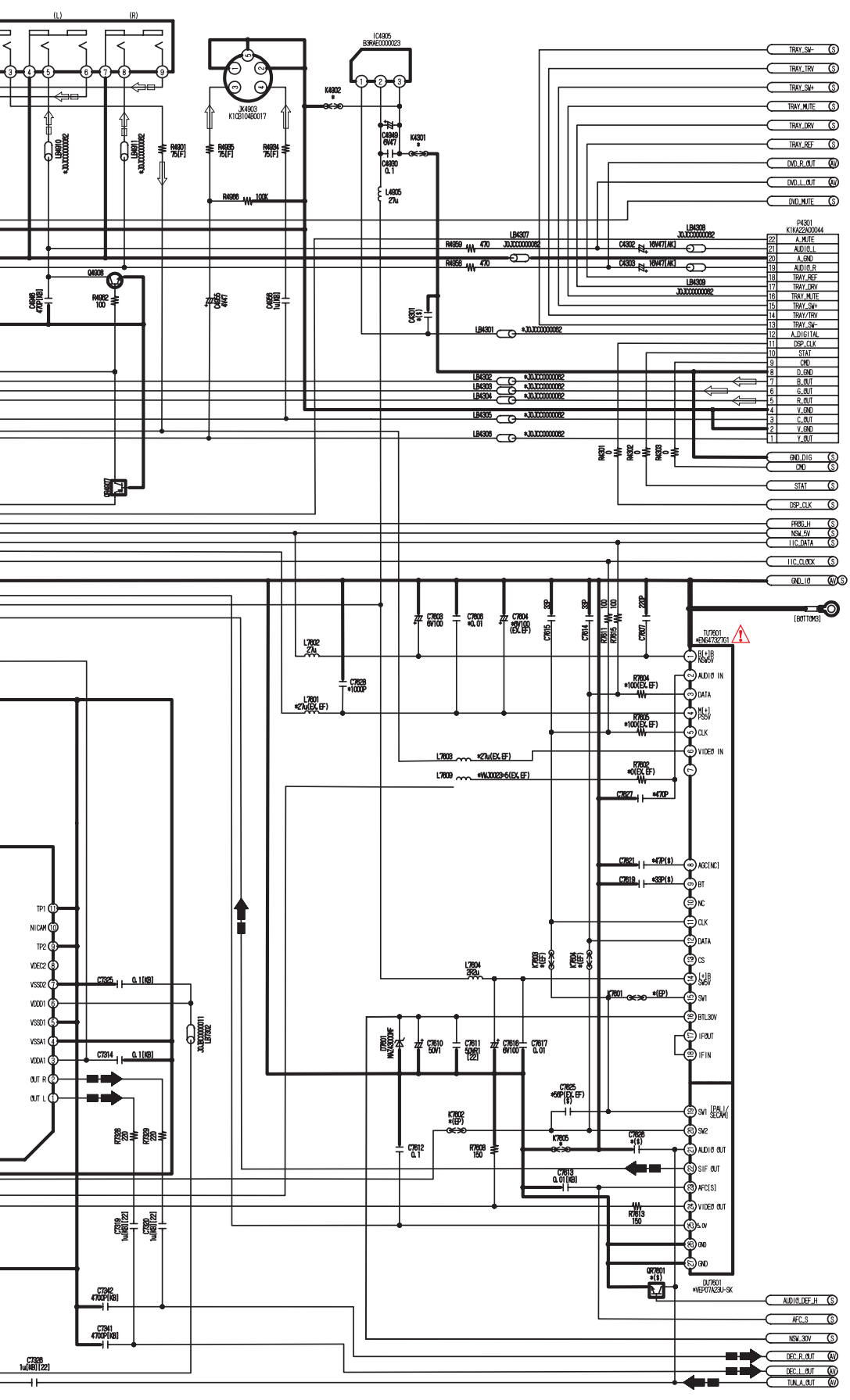
When replacing any of these components use only the same type.

NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
MAIN PCB - I/O 1/2
SCHEMATIC DIAGRAM

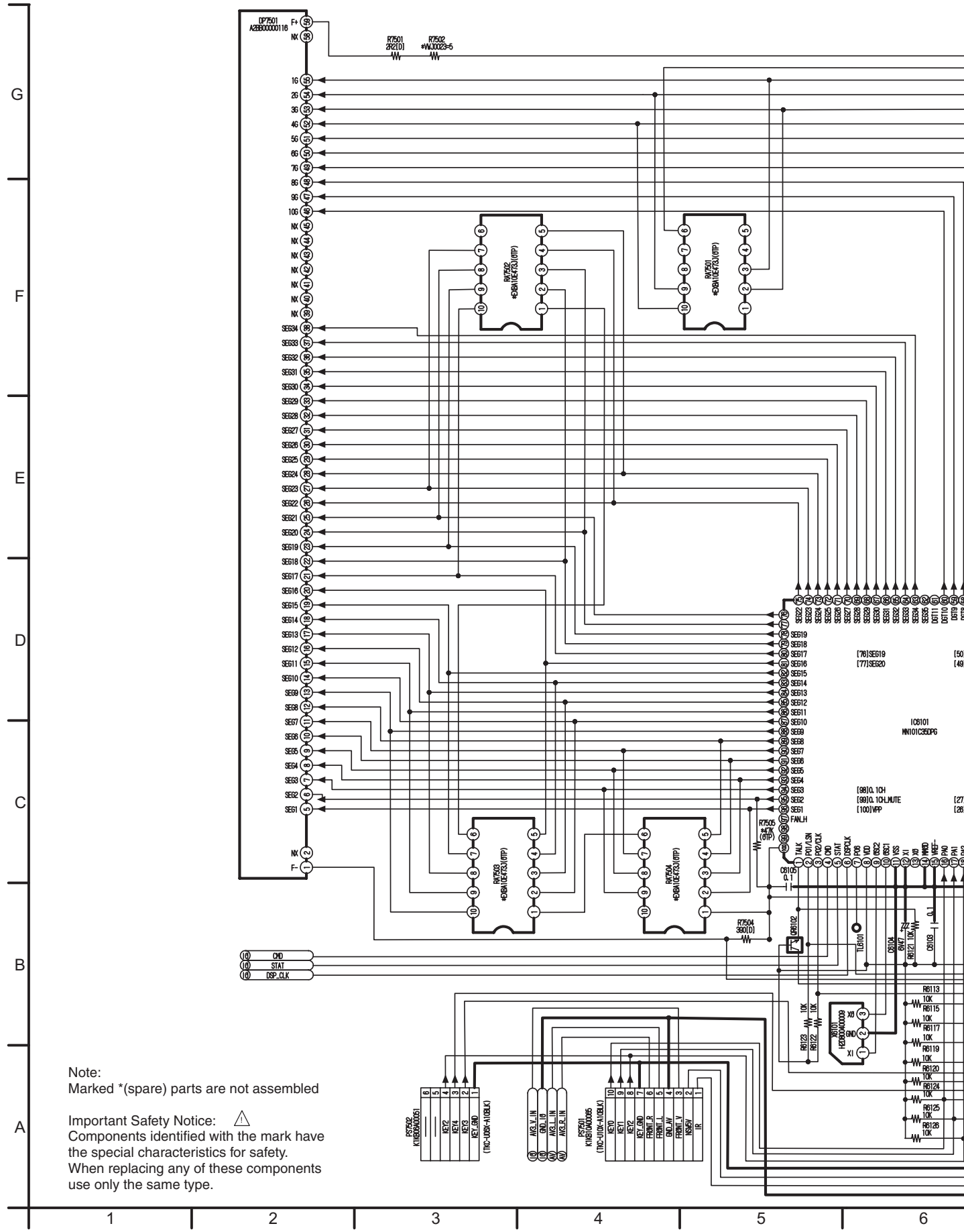

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
MAIN PCB - I/O 1/2
MAIN PCB - I/O 1/2
IIC DATA
IIC CLOCK
V_GND
PROG_H
CPSDMD OUT
AV1_R_OUT
AV1_L_OUT
B_AV2
G_AV2
R_AV2
IO_5V
BLINK
R_AV1
G_AV1
B_AV1
C_OUT
IIC CLOCK
V_IN
IIC DATA
NSW_5V
Y_OUT
IIC DATA
IIC CLOCK
VIDEO OUT
SW_5V
REG_5V
DU7601 PIN24
TU7601 PIN14
IC7301
C1AB00001404
(1DA9874AH)
Note:
Marked *(spare) parts are not assembled
Important Safety Notice:
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



NAVIGATION
MAIN PCB 1/2
MAIN PCB 2/2
MAIN PCB - I/O 1/2
MAIN PCB - I/O 2/2
MAIN PCB - SYSCON & SERVO 1/2
MAIN PCB - SYSCON & SERVO 2/2

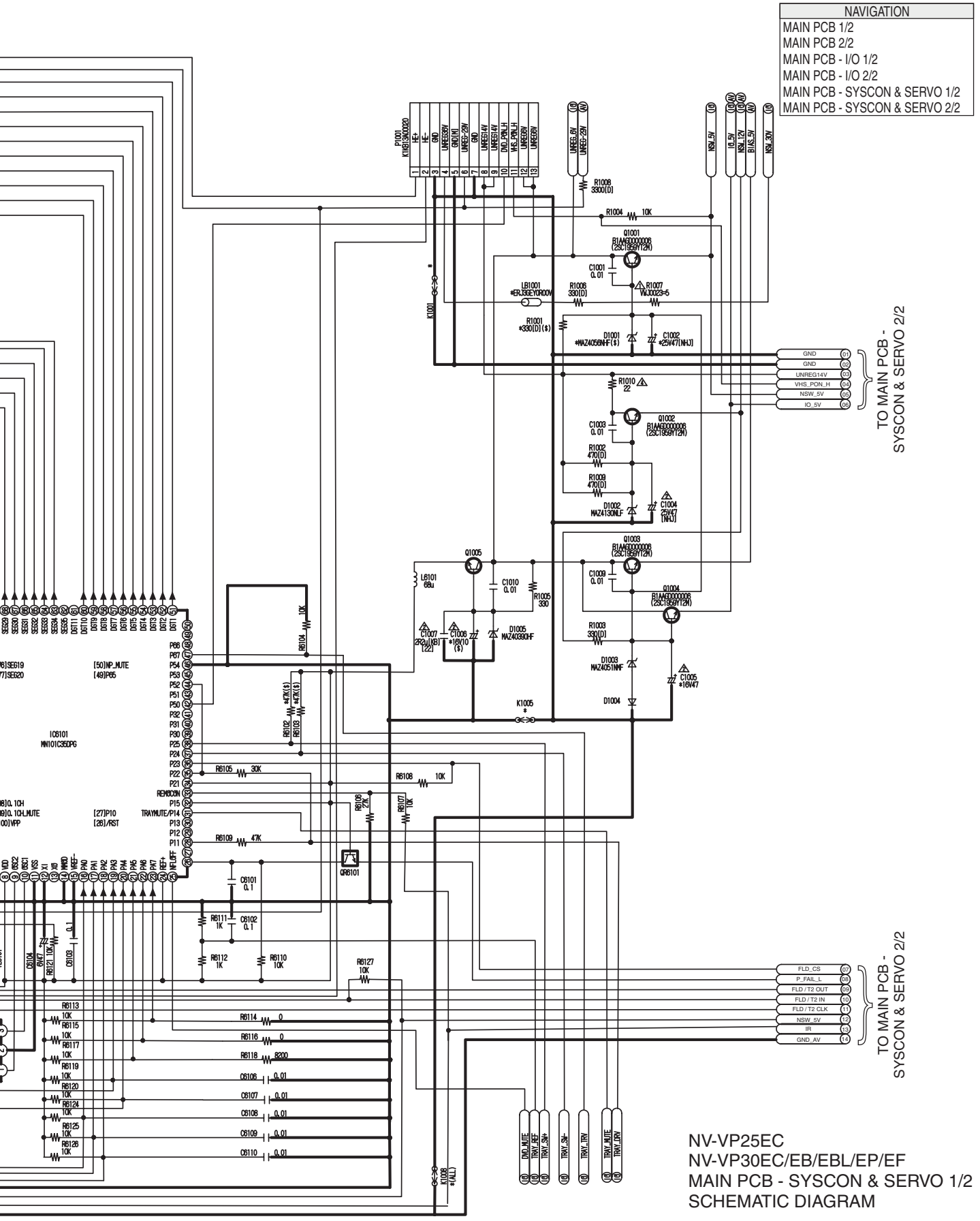
NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
MAIN PCB - I/O 2/2
SCHEMATIC DIAGRAM

18.4. MAIN PCB - SYSCON & SERVO

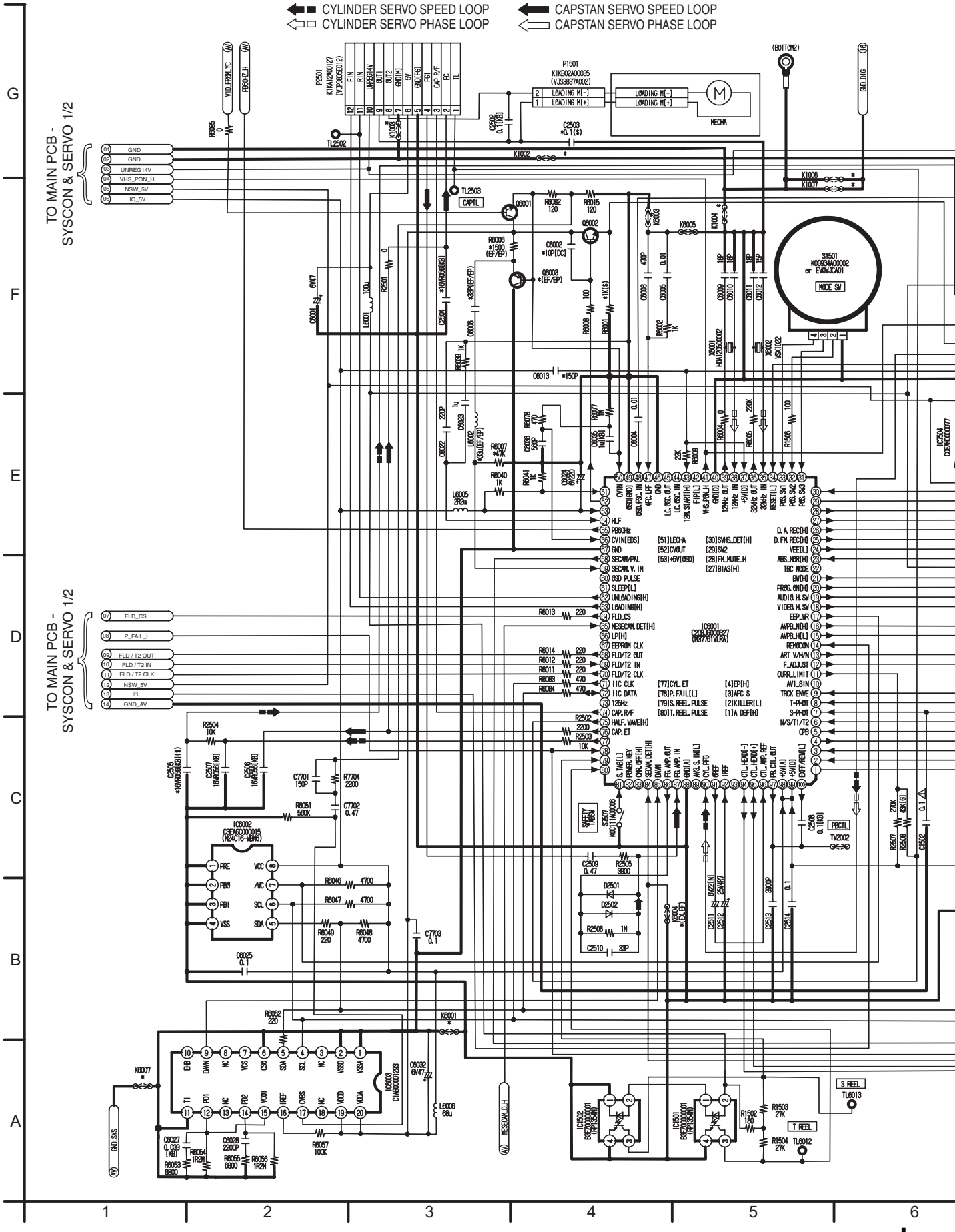


Note:
Marked *(spare) parts are not assembled

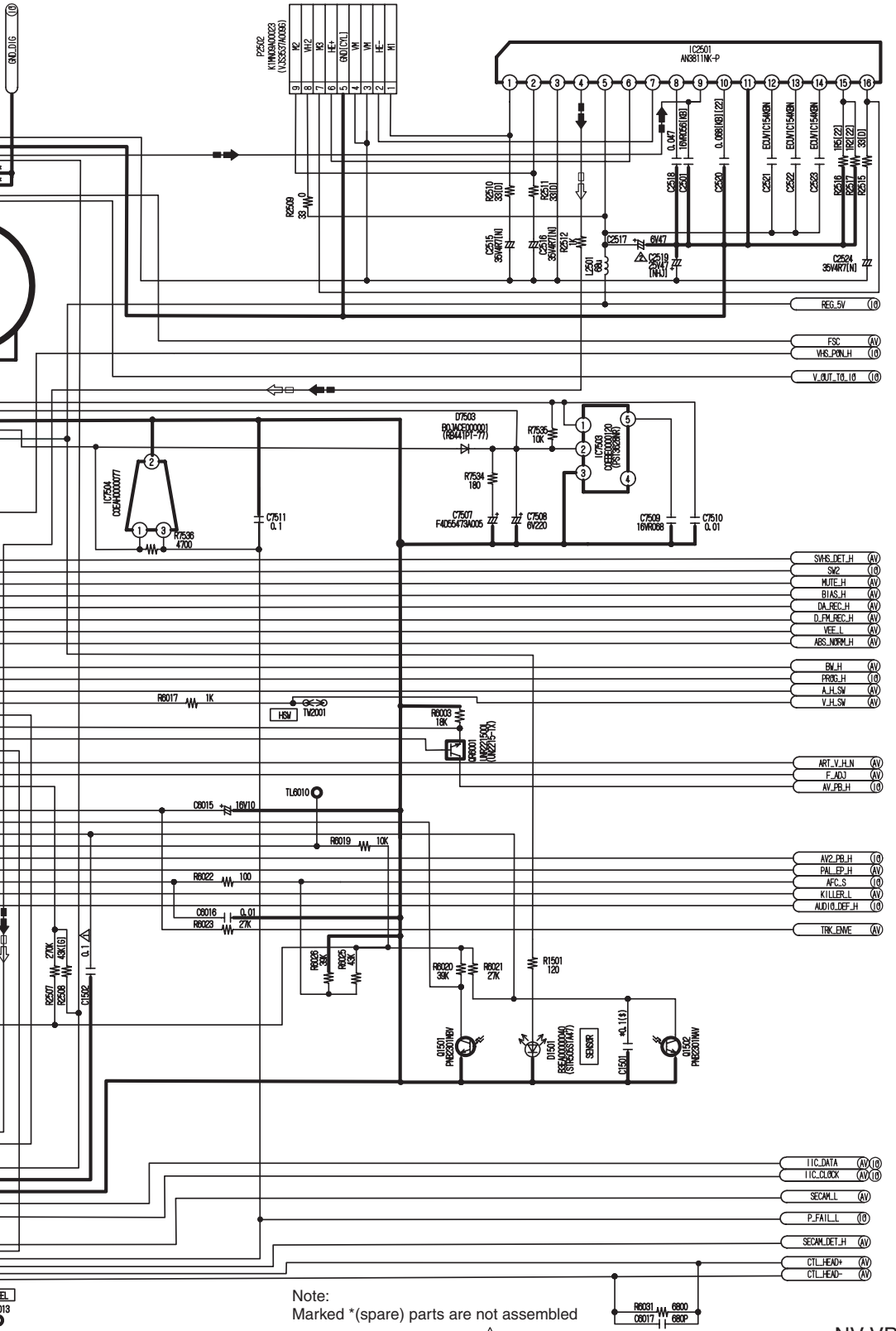
Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
MAIN PCB - SYSCON & SERVO 1/2
SCHEMATIC DIAGRAM


CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP
CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
TO MAIN PCB - SYSCON & SERVO 1/2
TO MAIN PCB - SYSCON & SERVO 1/2
P2501
P1501
K1KB02A00035
(VJS3837A002)
LOADING M(-)
LOADING M(+)
MECHA
S1501
K0694A00002
or EVQWJCA01
MODE SW
IC6001
C2EBJB000827
(M37761V1RA)
IC6002
C3EAG0000015
(M24C16-WBN6)
IC6003
C1AB00001288
IC1501
IC1502
S REEL
T REEL
TL6012
TL6013
CAPTL
PRCTL
SHEET END
GND_SYS
GND_DIG
MESECAM_D.H

NAVIGATION
MAIN PCB 1/2
MAIN PCB 2/2
MAIN PCB - I/O 1/2
MAIN PCB - I/O 2/2
MAIN PCB - SYSCON & SERVO 1/2
MAIN PCB - SYSCON & SERVO 2/2

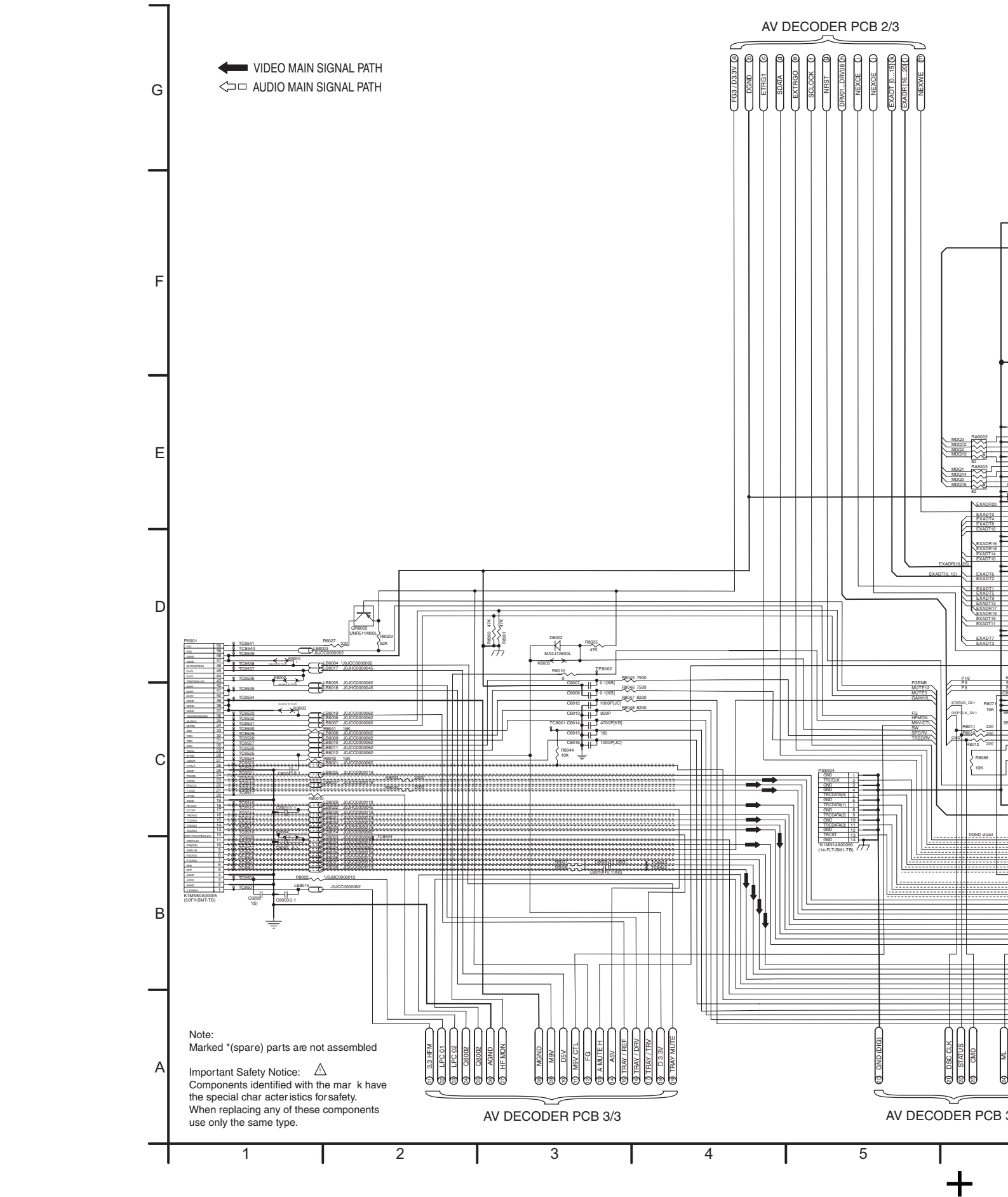


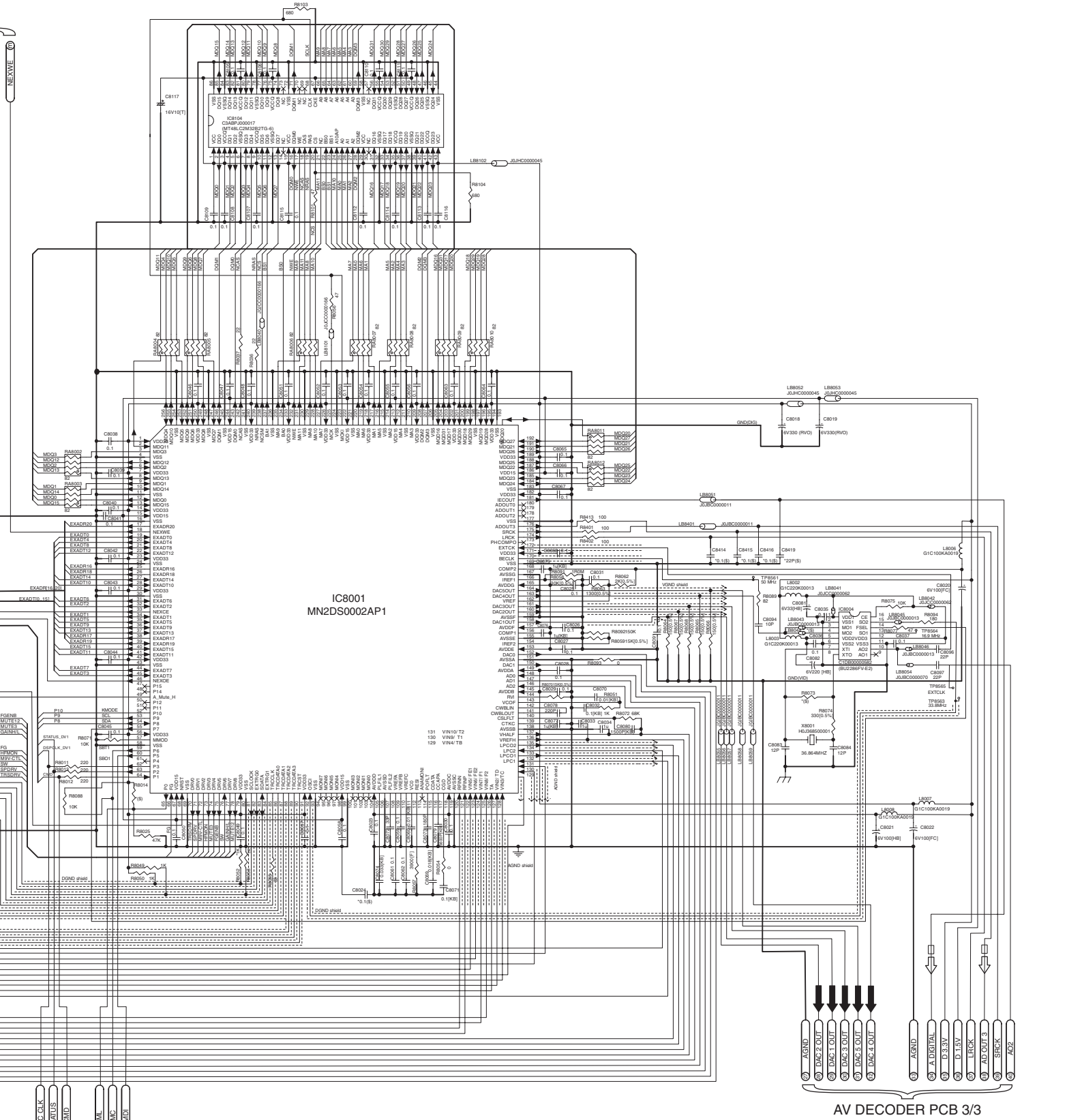
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.

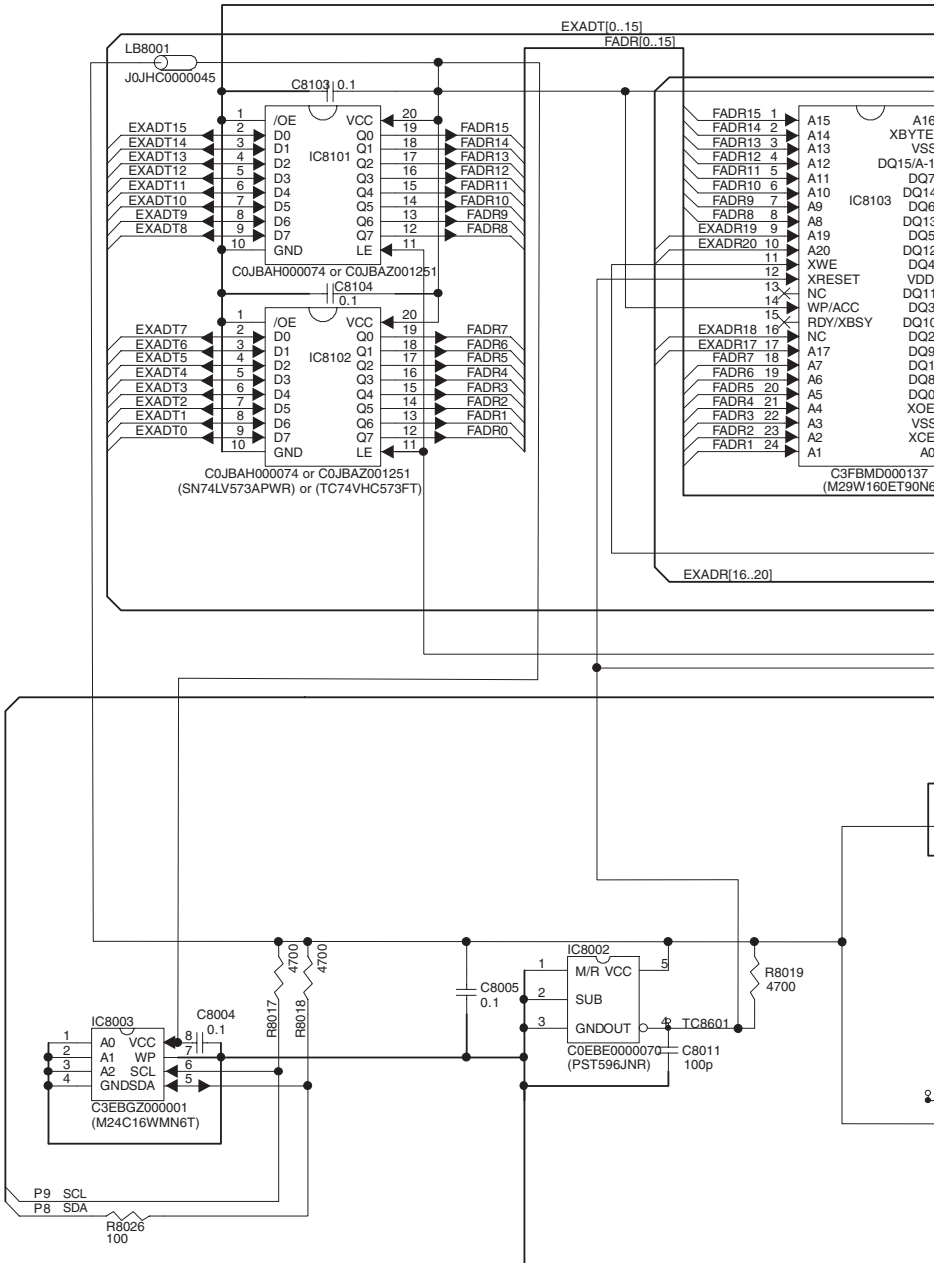
NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
MAIN PCB - SYSCON & SERVO 2/2
SCHEMATIC DIAGRAM

18.5. AV DECODER PCB



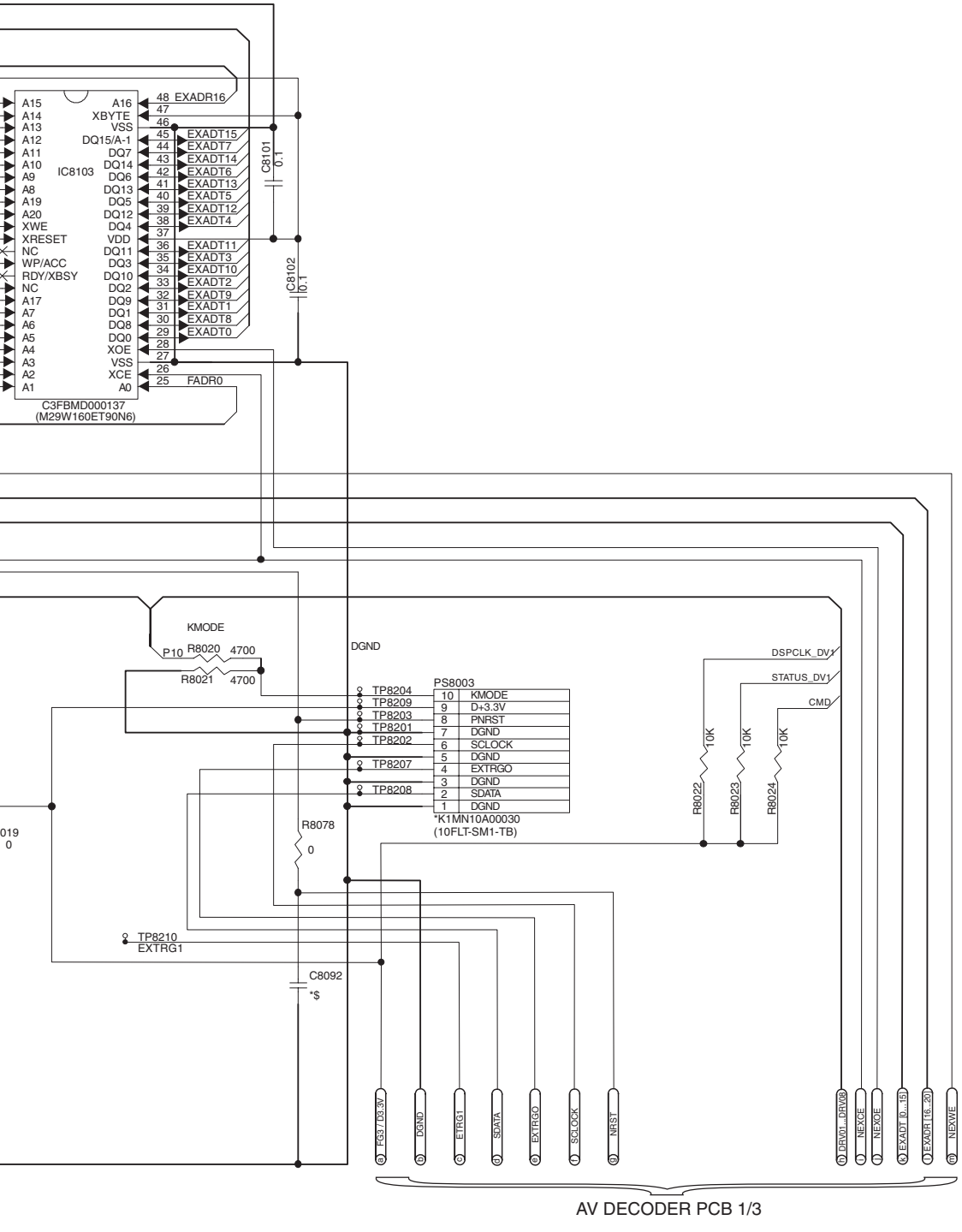


NV-VP25EC / NV-30EC/EB/EBL/EP/EF
AV DECODER PCB 1/3
SCHEMATIC DIAGRAM



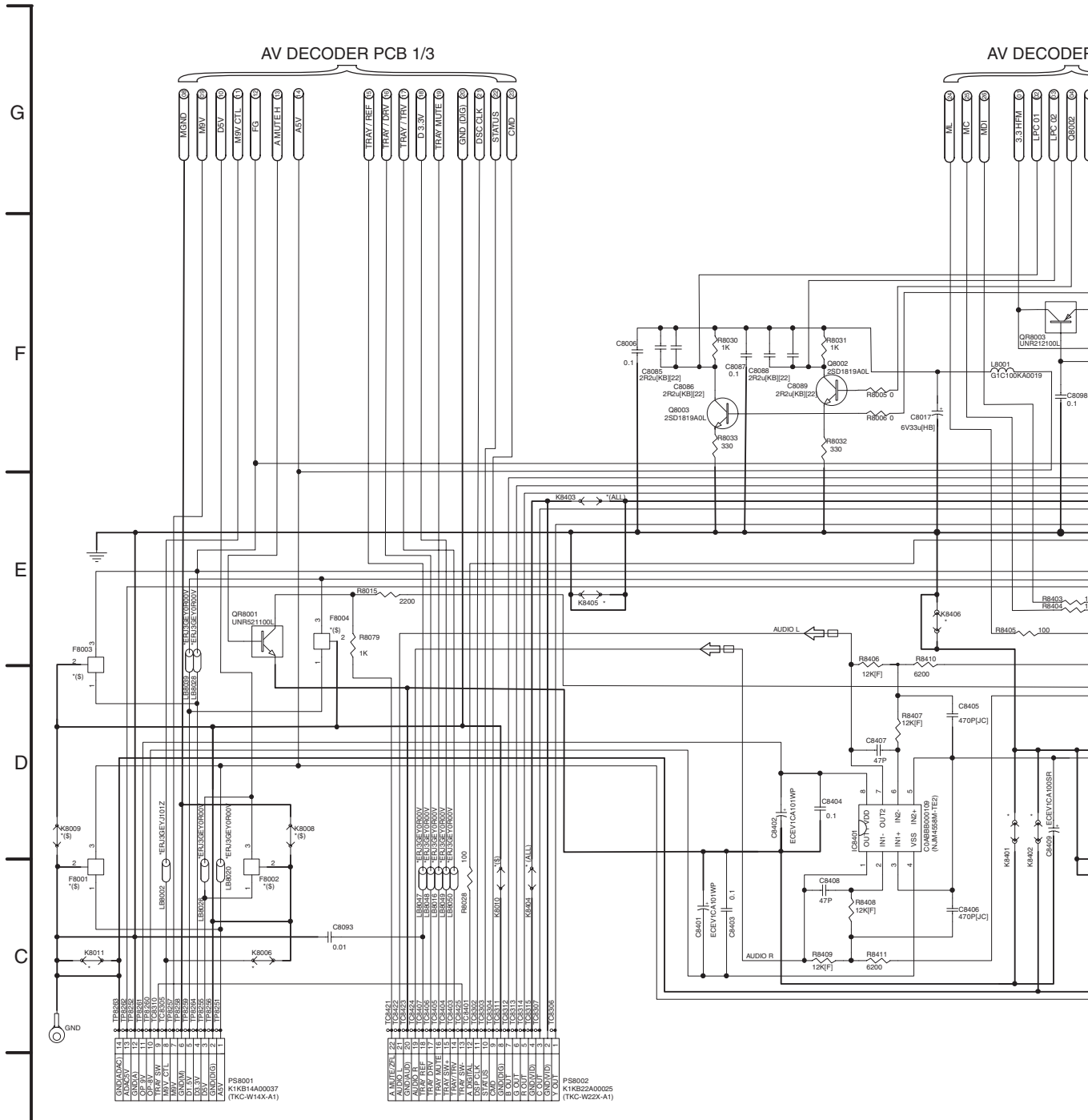
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



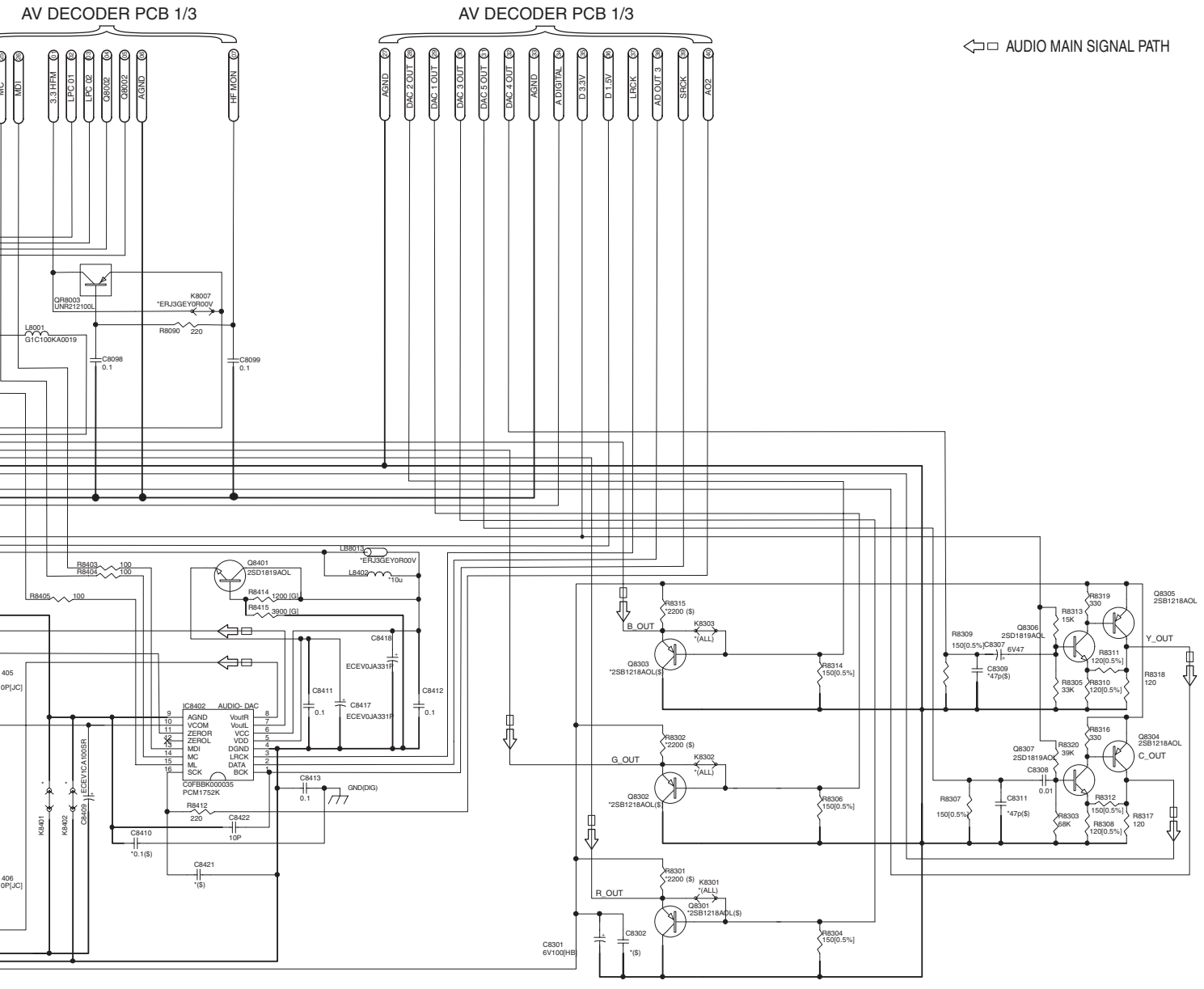
AV DECODER PCB 1/3

NV-VP25EC
NV-30EC/EB/EBL/EP/EF
AV DECODER PCB 2/3
SCHEMATIC DIAGRAM



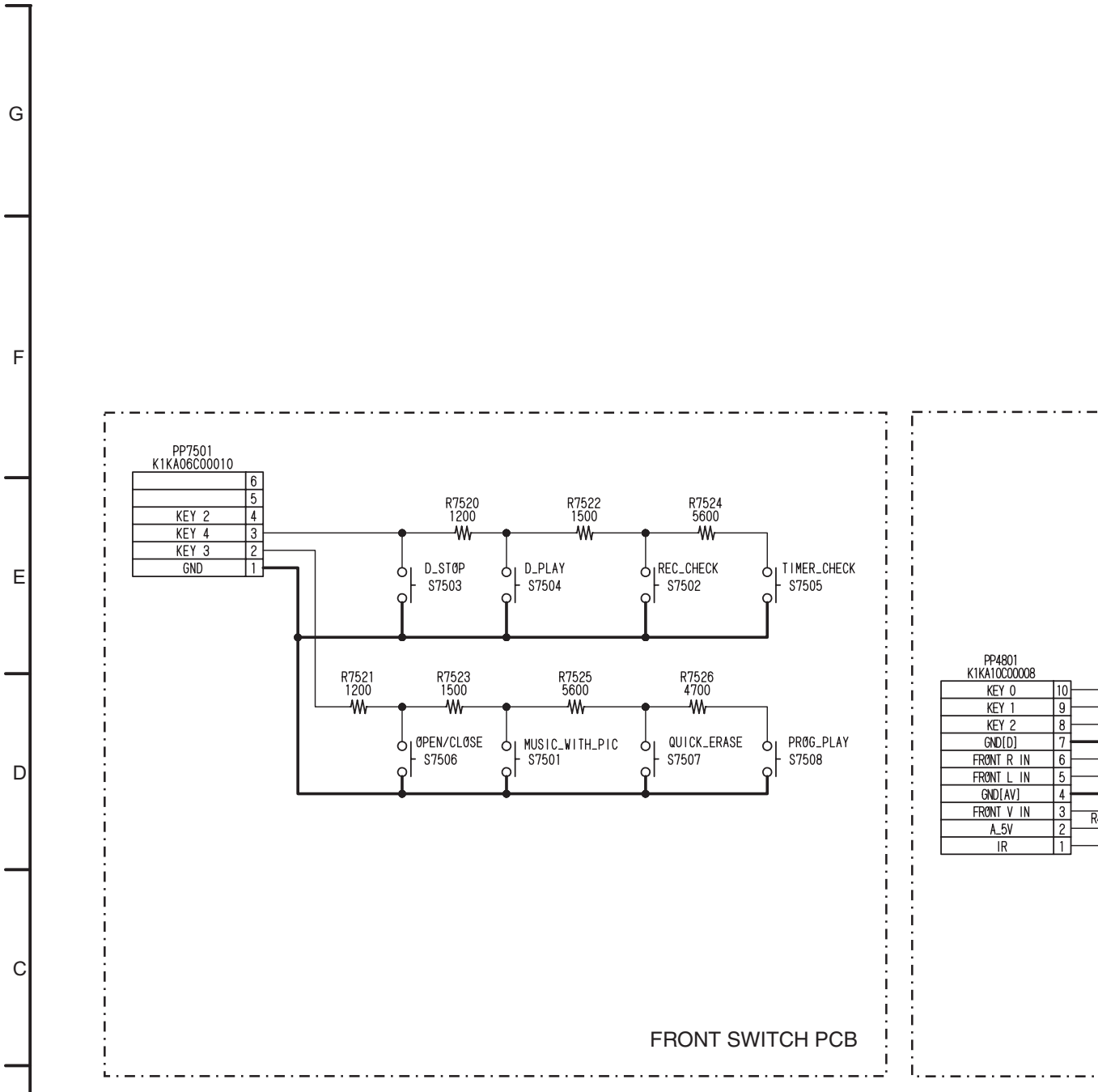
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



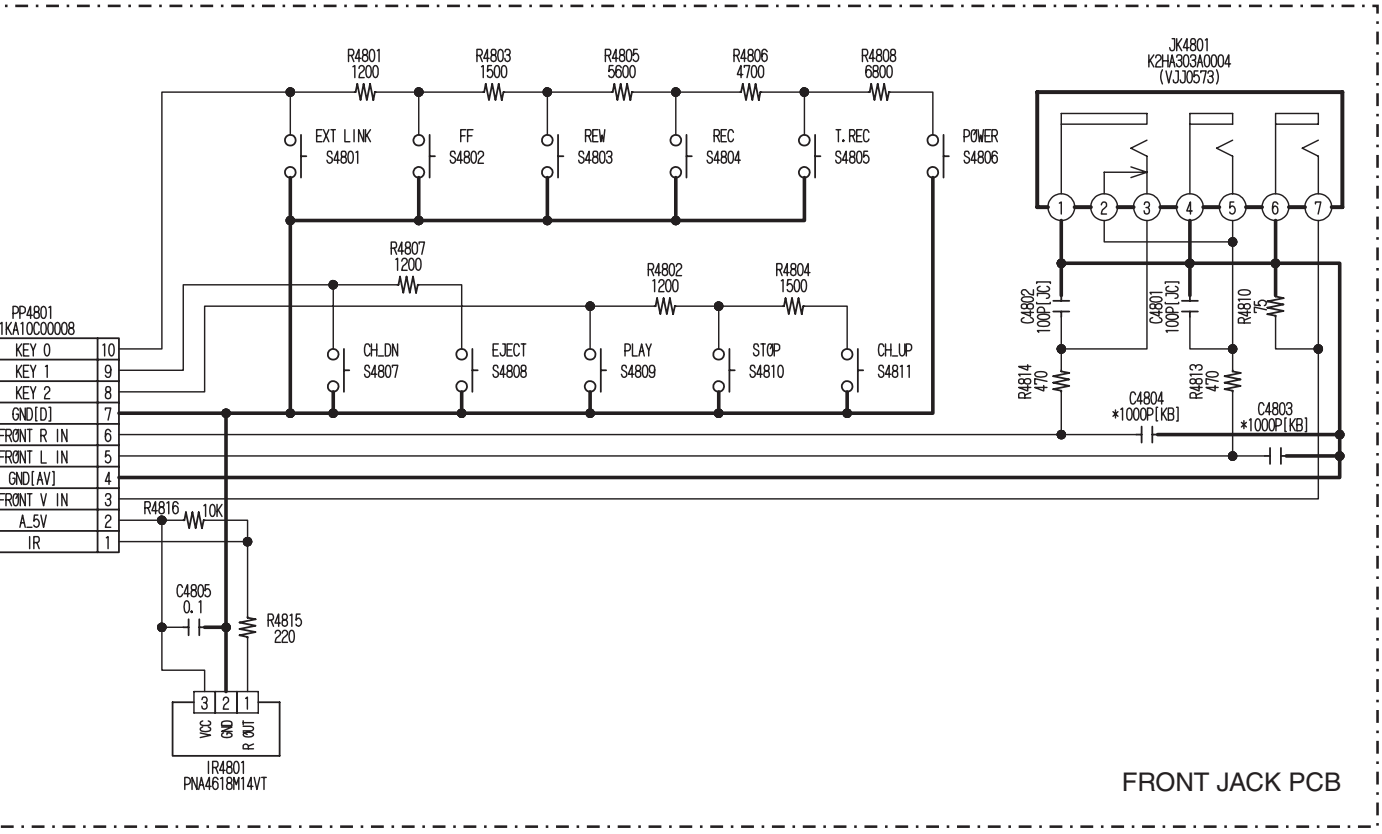
NV-VP25EC
NV-30EC/EB/EBL/EP/EF
AV DECODER PCB 3/3
SCHEMATIC DIAGRAM

18.6. FRONT PANEL PCB



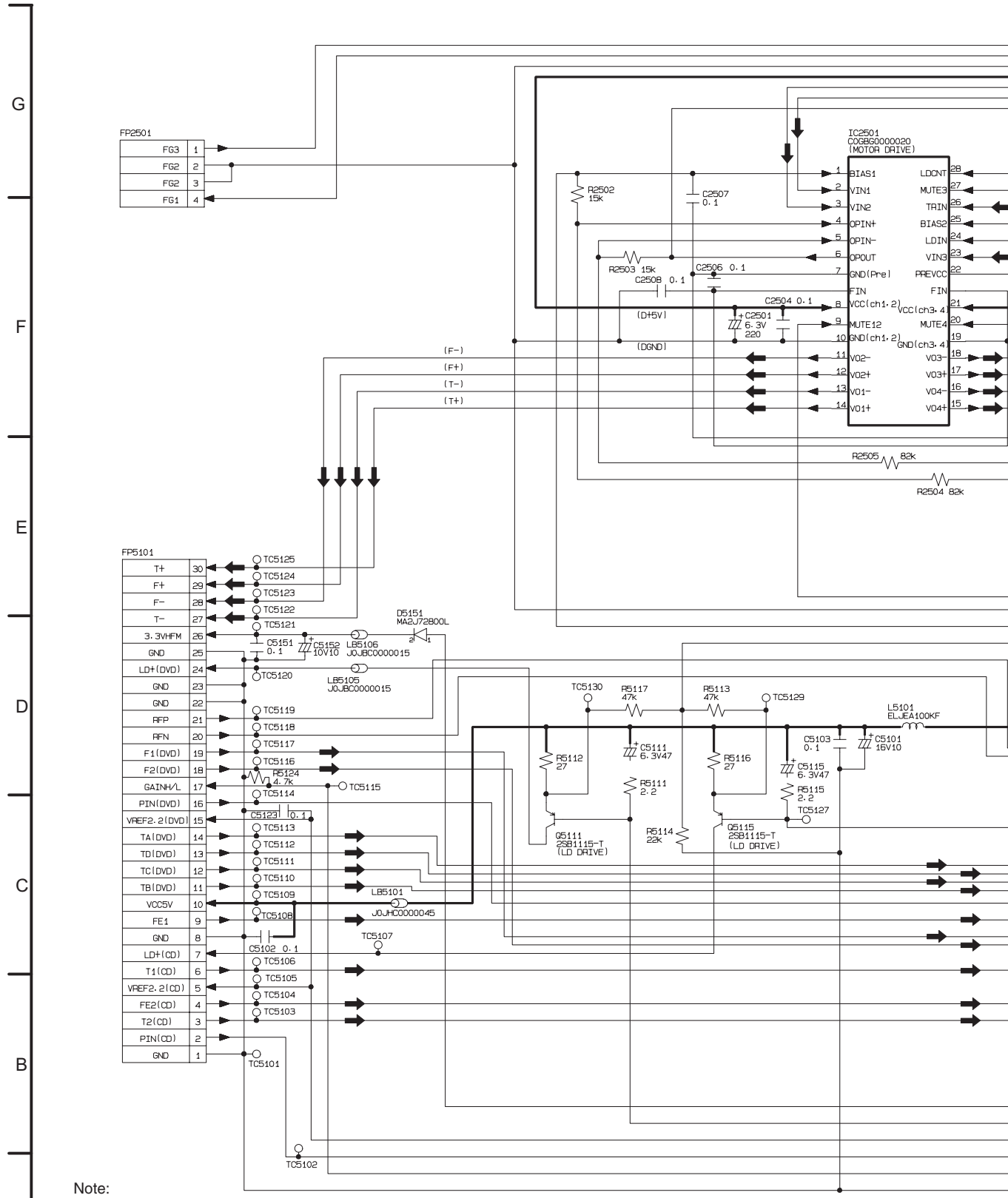
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



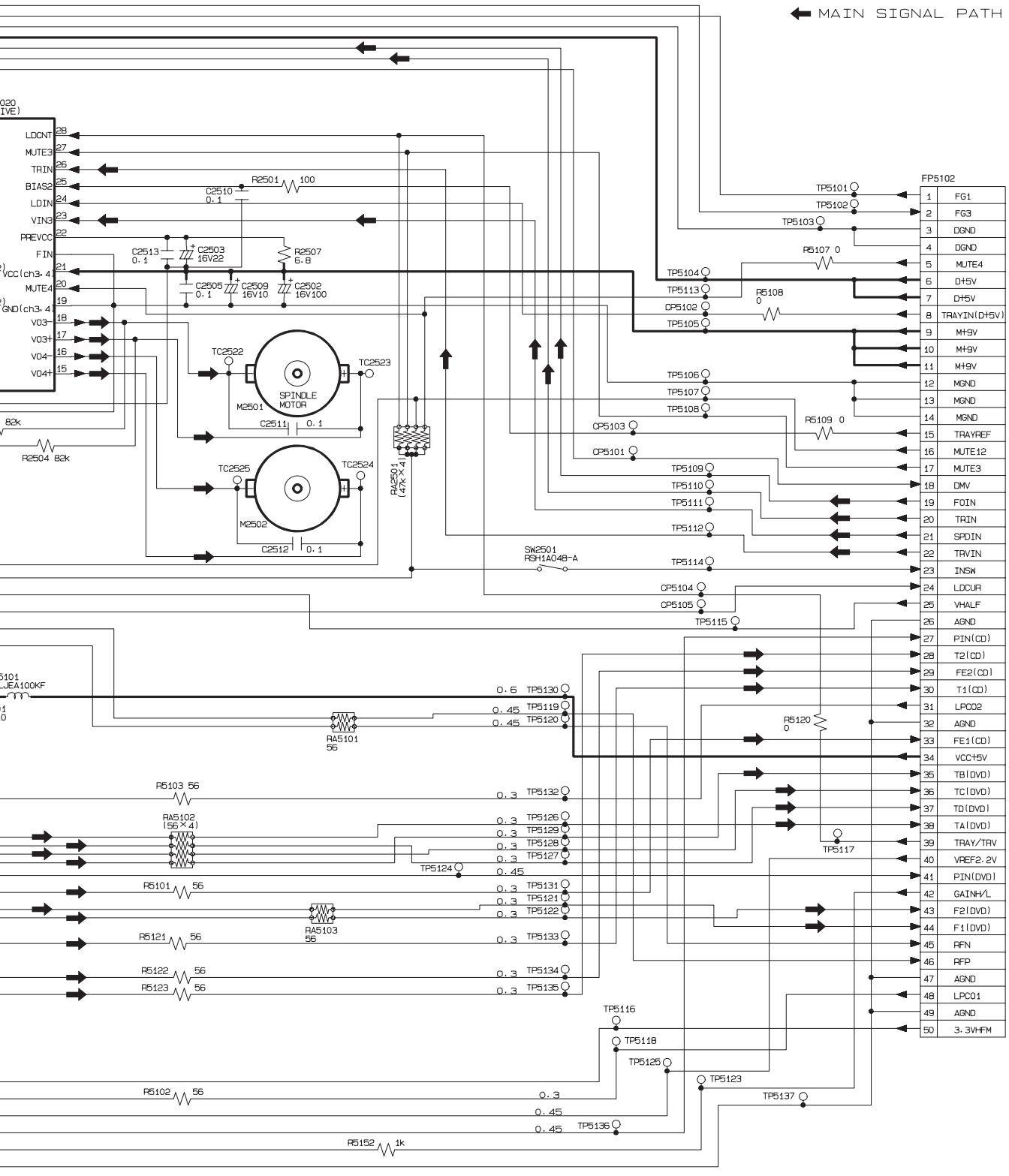
NV-VP25EC
VP30EC/EB/EBL/EP/EF
FRONT PANEL PCB
SCHEMATIC DIAGRAM

18.7. TERMINAL PCB



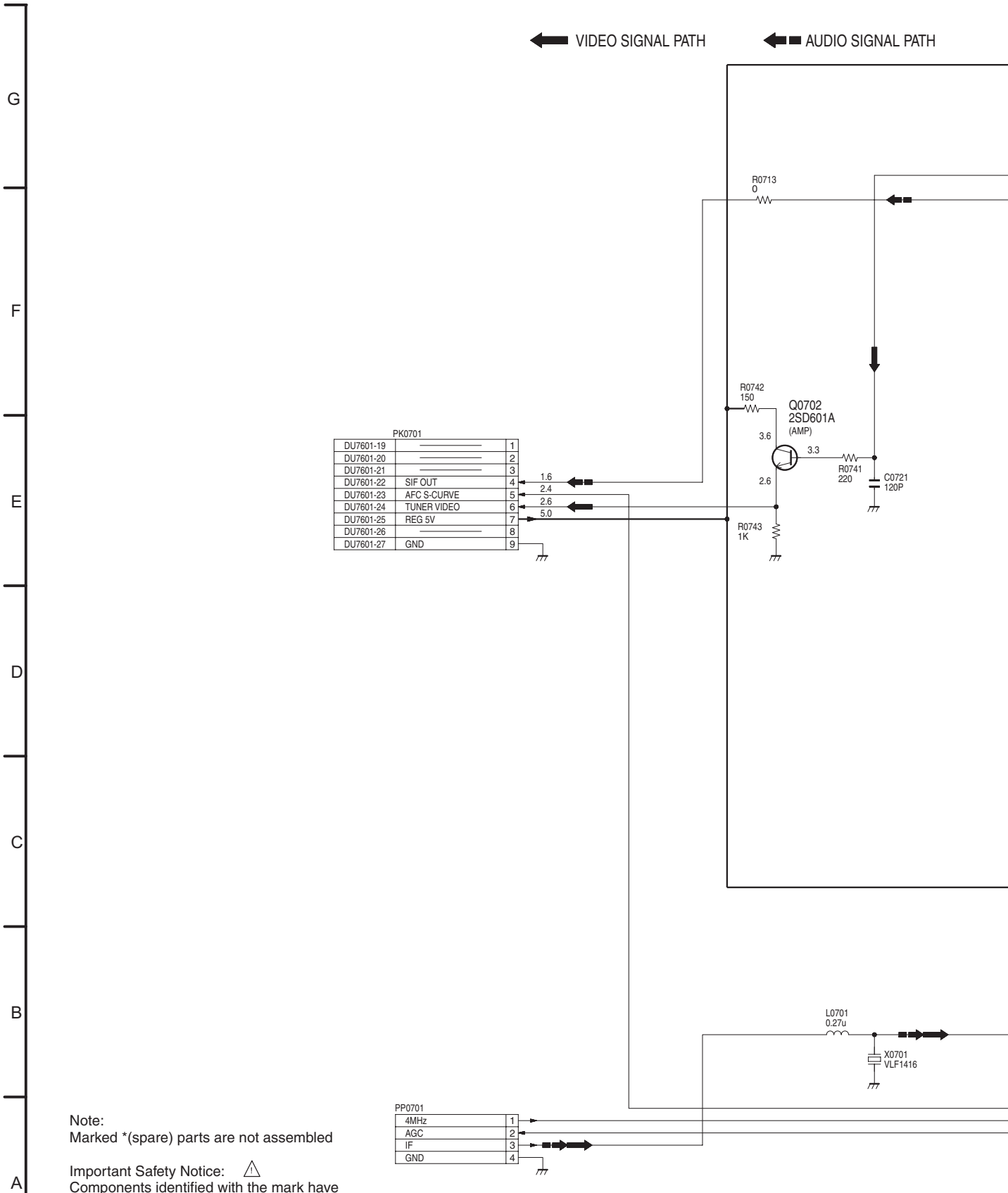
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.



NV-VP25EC
VP30EC/EB/EBL/EP/EF
TERMINAL PCB
SCHEMATIC DIAGRAM

18.8. TV DEMODULATOR PACK (NV-VP25EC / 30EC / 30EB / 30EBL / 30EP)



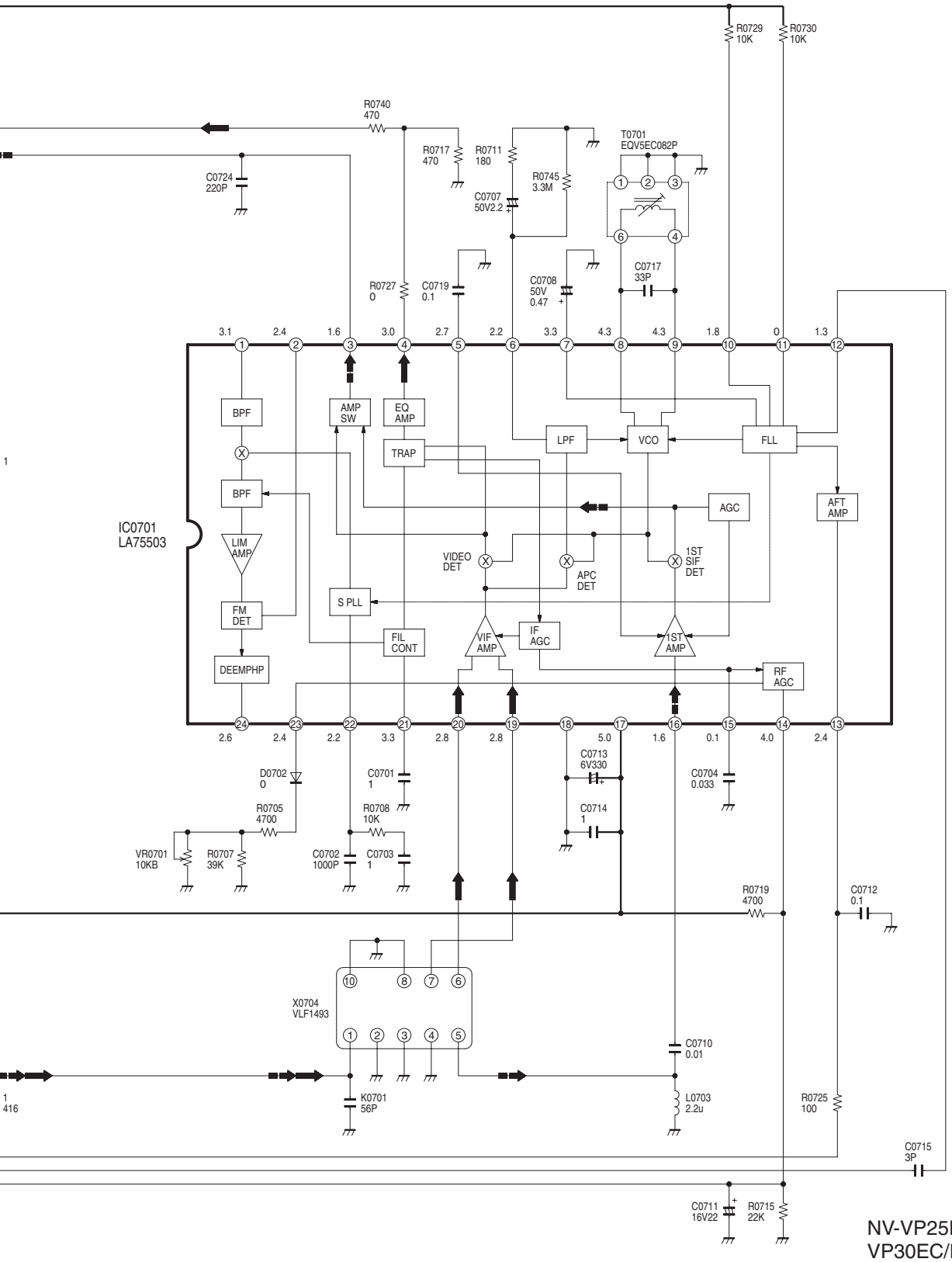
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MOD

0EP)

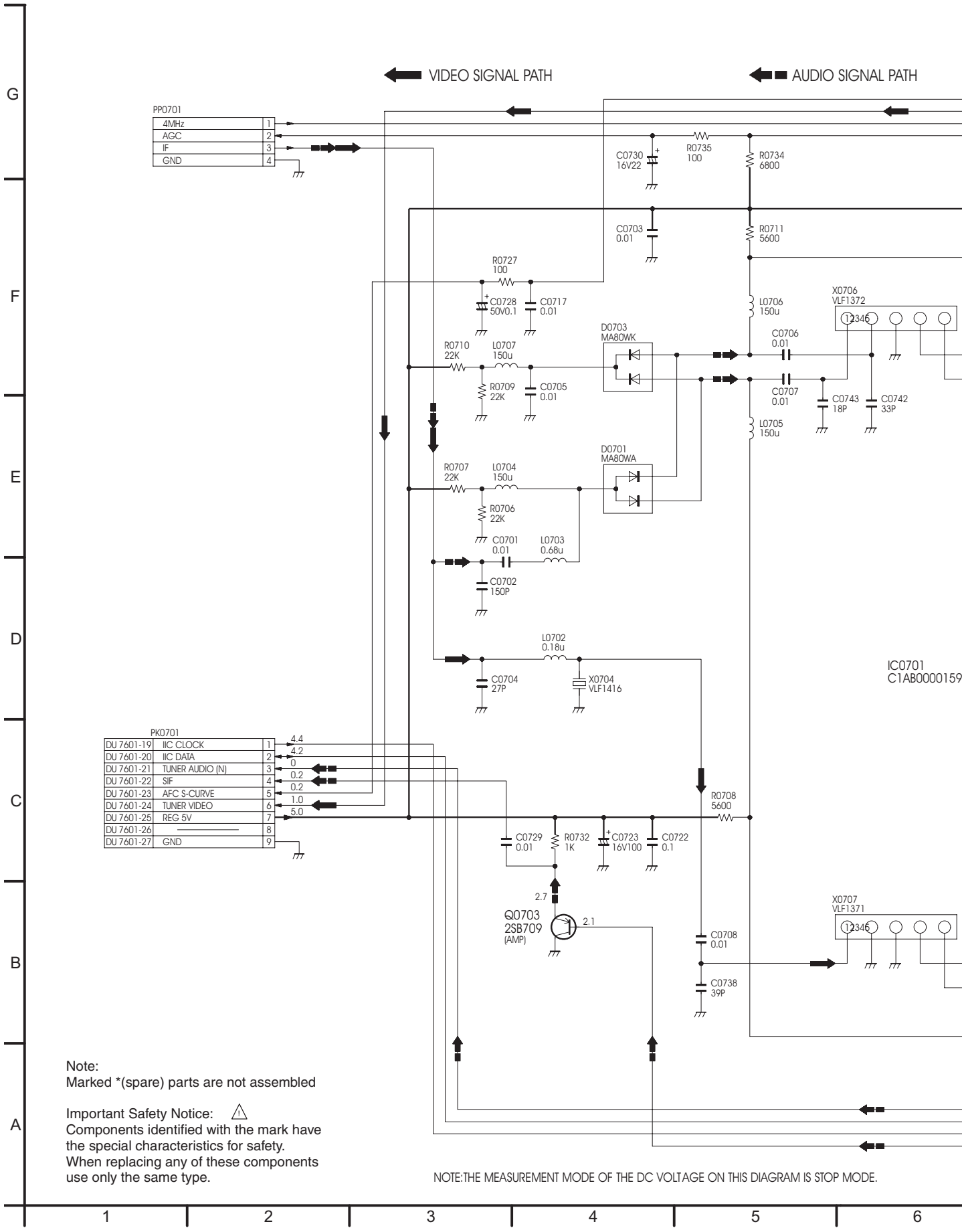
PATH



IS STOP MODE.

NV-VP25EC
VP30EC/EB/EBL/EP
TV DEMODULATOR PACK
SCHEMATIC DIAGRAM

18.9. TV DEMODULATOR PACK (NV-VP30EF)

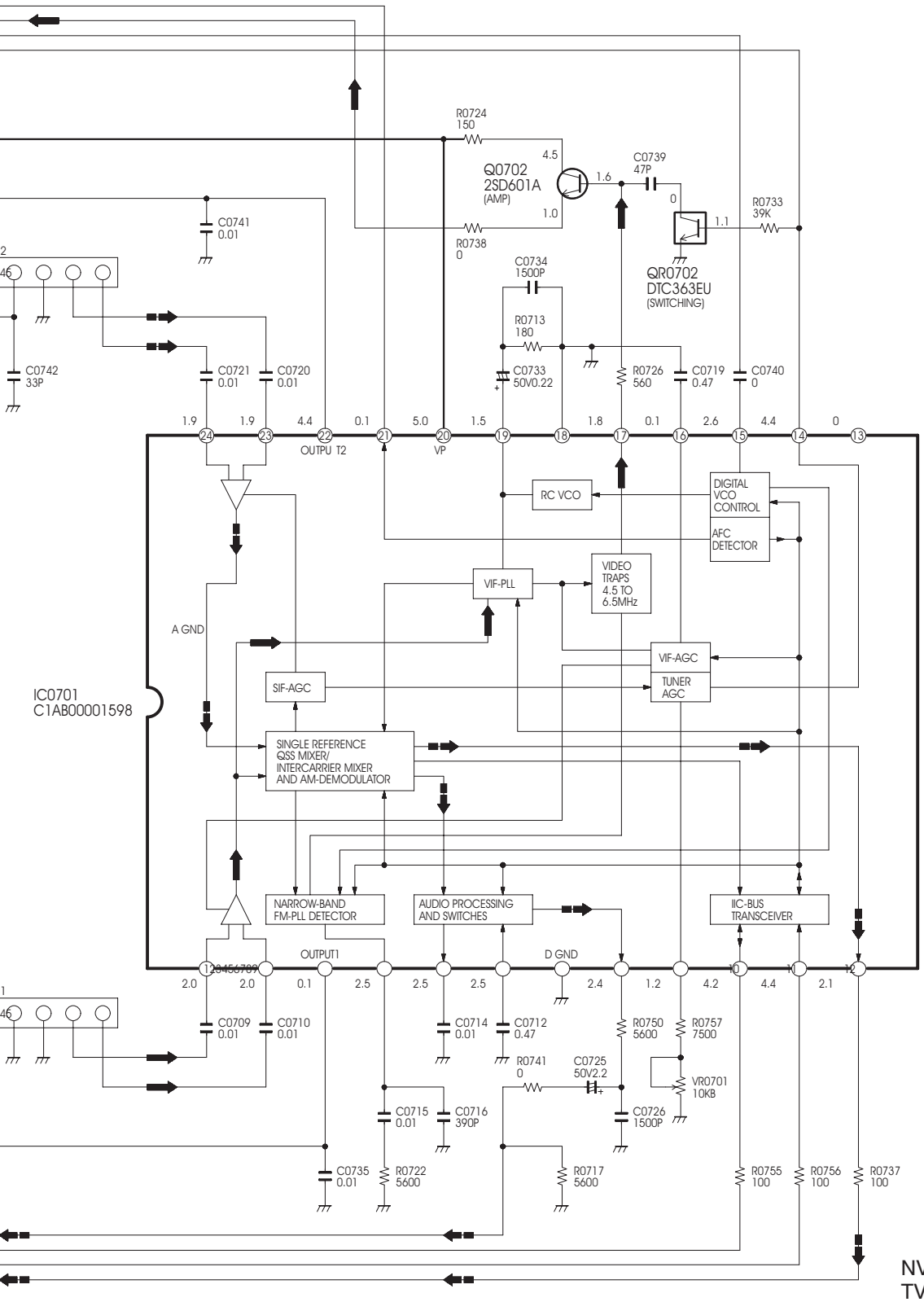


Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

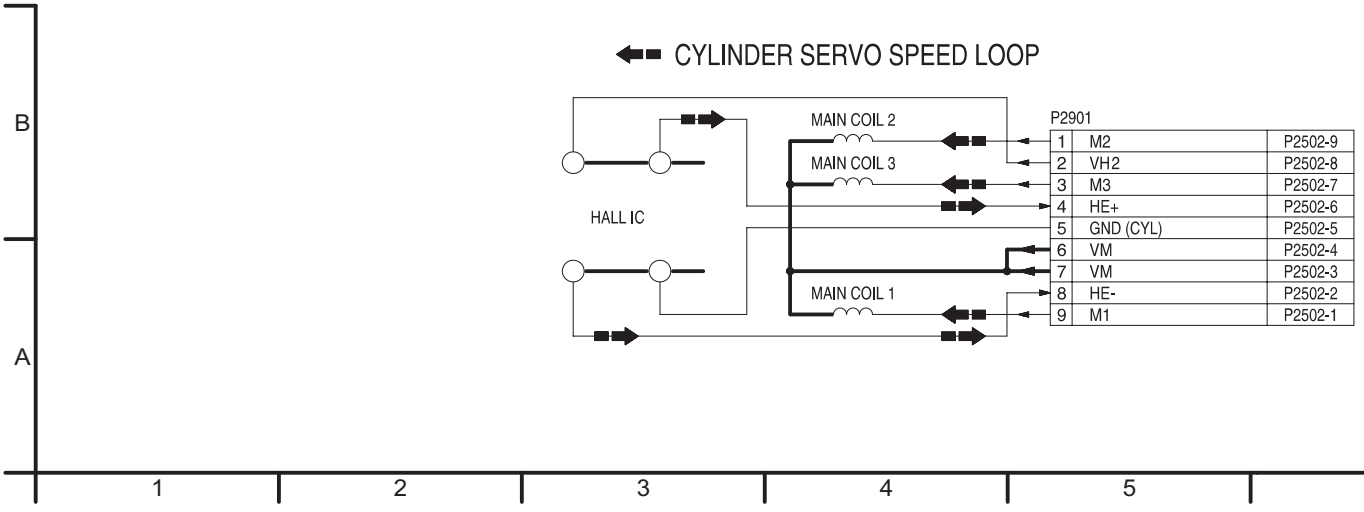
NAL PATH

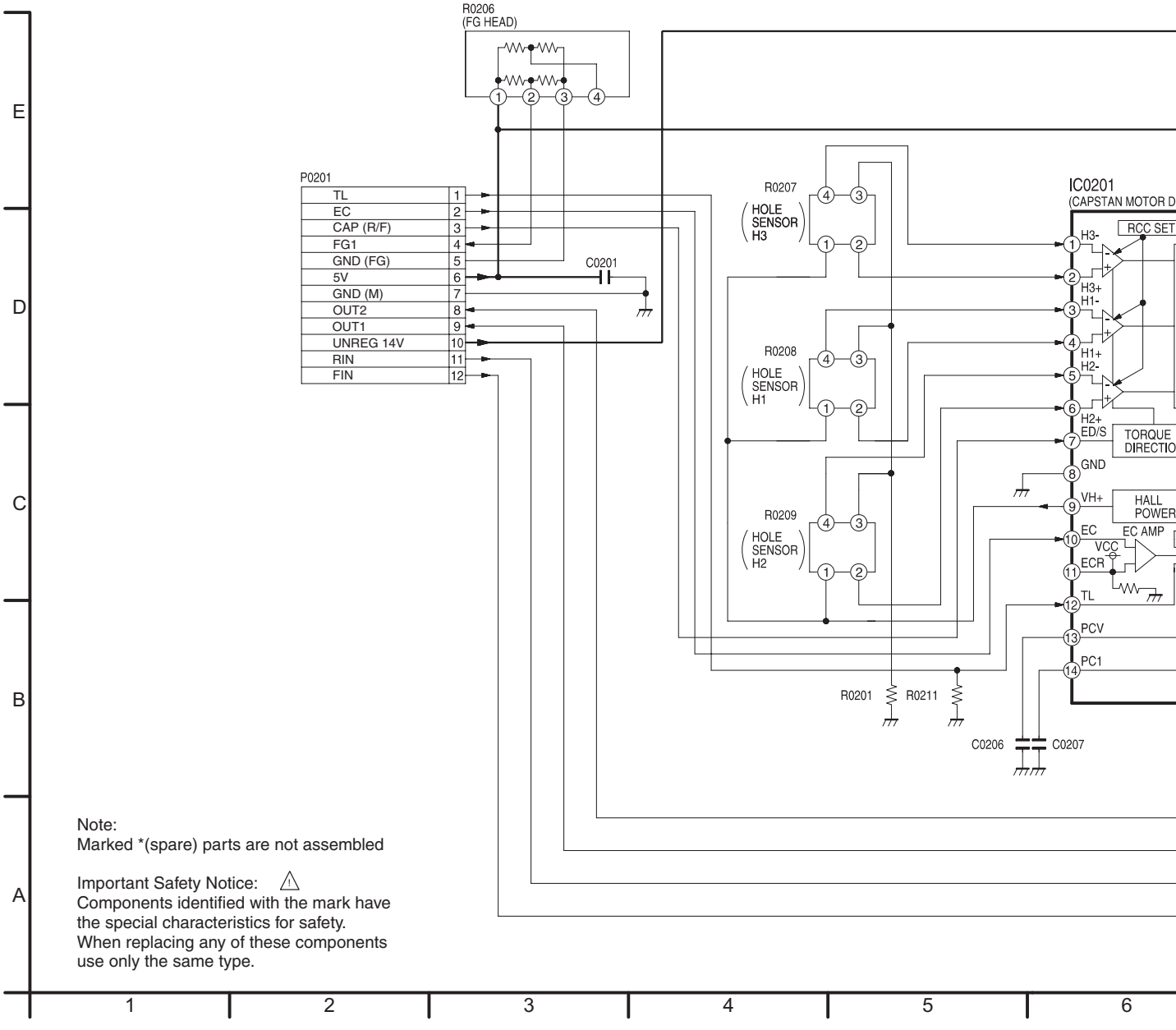


NV-VP30EF
TV DEMODULATOR PACK
SCHEMATIC DIAGRAM

DE.

18.10. VCR MECHANISM - CAPSTAN PCB / CYLINDER STATOR PCB





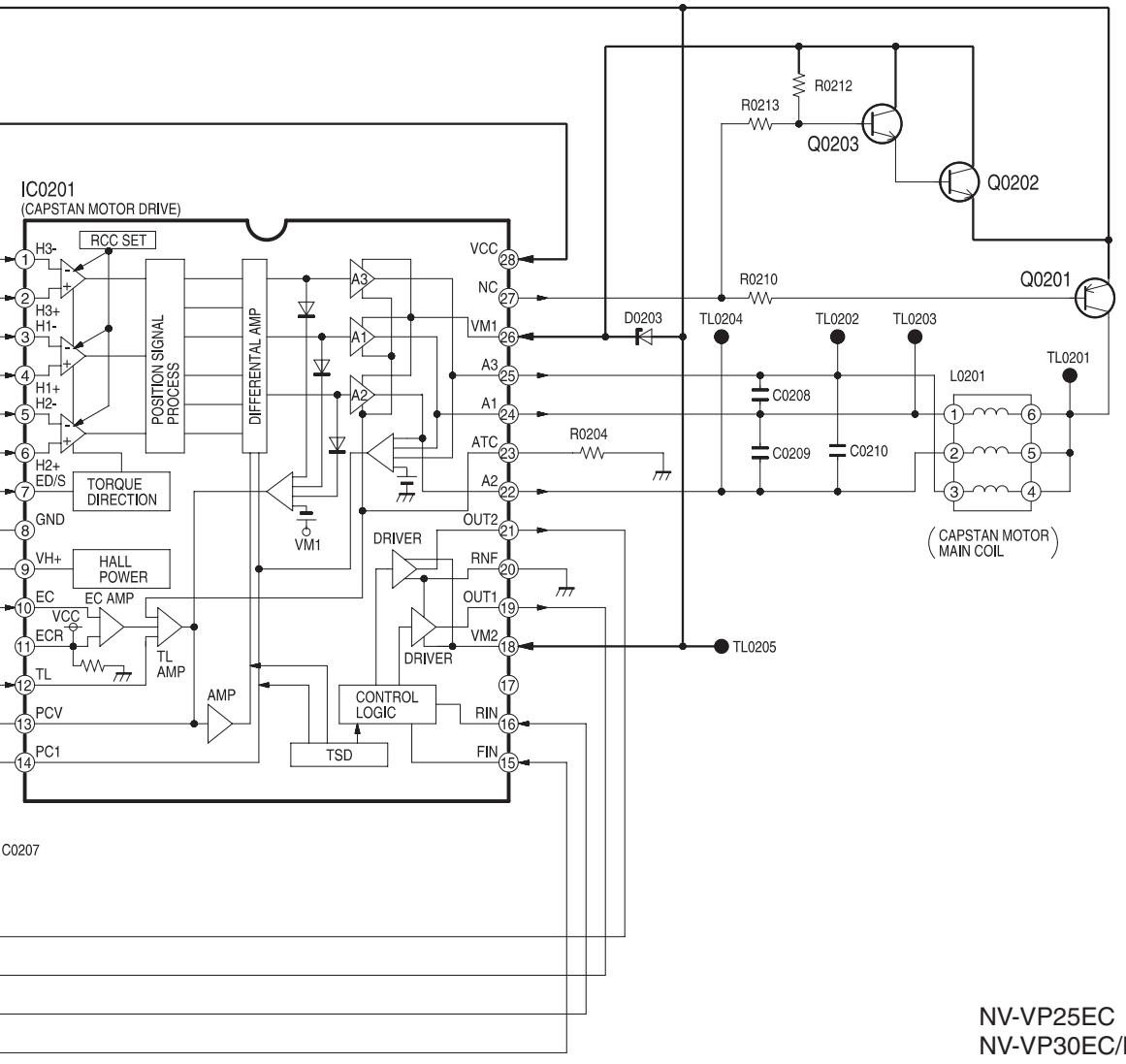
Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.

P2502-9
P2502-8
P2502-7
P2502-6
P2502-5
P2502-4
P2502-3
P2502-2
P2502-1

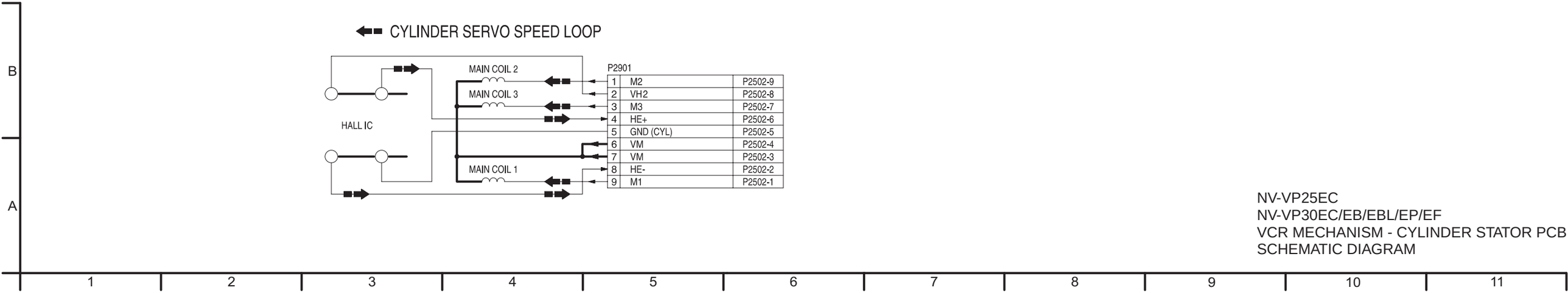
NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
VCR MECHANISM - CYLINDER STATOR PCB
SCHEMATIC DIAGRAM

6 7 8 9 10 11

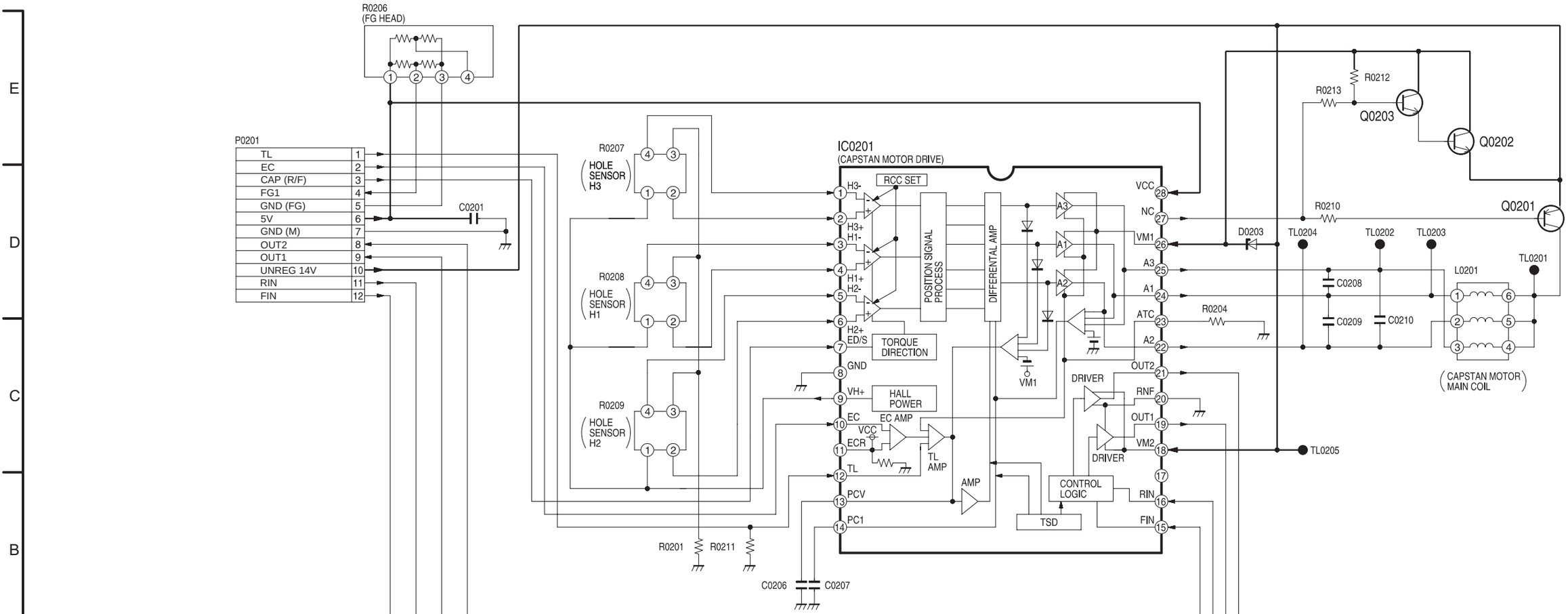


NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
VCR MECHANISM - CAPSTAN PCB
SCHEMATIC DIAGRAM

6 7 8 9 10 11



NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
VCR MECHANISM - CYLINDER STATOR PCB
SCHEMATIC DIAGRAM



Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.

NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
VCR MECHANISM - CAPSTAN PCB
SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH

AUDIO MAIN SIGNAL PATH

AV DECODER PCB 2/3

IC8001
MN2DS0002AP1

Note:
Marked *(spare) parts are not assembled

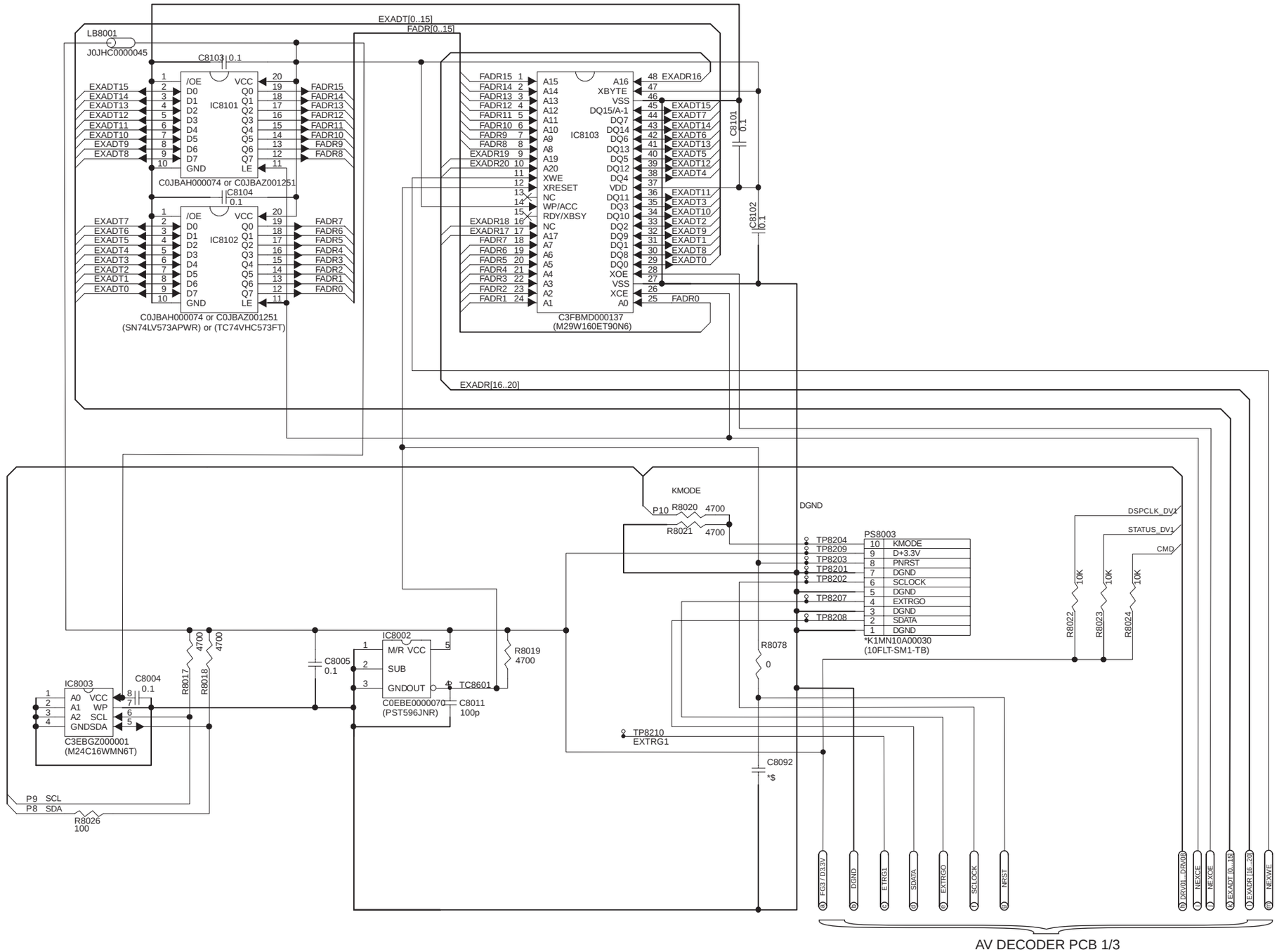
Important Safety Notice: ⚠
Components identified with the mar k have the special char acter istics for safety.
When replacing any of these components use only the same type.

AV DECODER PCB 3/3

AV DECODER PCB 3/3

AV DECODER PCB 3/3

NV-VP25EC / NV-30EC/EB/EBL/EP/EF
AV DECODER PCB 1/3
SCHEMATIC DIAGRAM



Note:
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NV-VP25EC
NV-30EC/EB/EBL/EP/EF
AV DECODER PCB 2/3
SCHEMATIC DIAGRAM

AV DECODER PCB 1/3

AV DECODER PCB 1/3

AV DECODER PCB 1/3

AUDIO MAIN SIGNAL PATH

Note:
Marked *(spare) parts are not assembled

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When replacing any of these components use only the same type.

NV-VP25EC
NV-30EC/EB/EBL/EP/EF
AV DECODER PCB 3/3
SCHEMATIC DIAGRAM

VIDEO SIGNAL PATH

AUDIO SIGNAL PATH

PK0701

DU7601-19		1
DU7601-20		2
DU7601-21		3
DU7601-22	SIF OUT	4
DU7601-23	AFC S-CURVE	5
DU7601-24	TUNER VIDEO	6
DU7601-25	REG 5V	7
DU7601-26		8
DU7601-27	GND	9

PP0701

4MHz	1
AGC	2
IF	3
GND	4

Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
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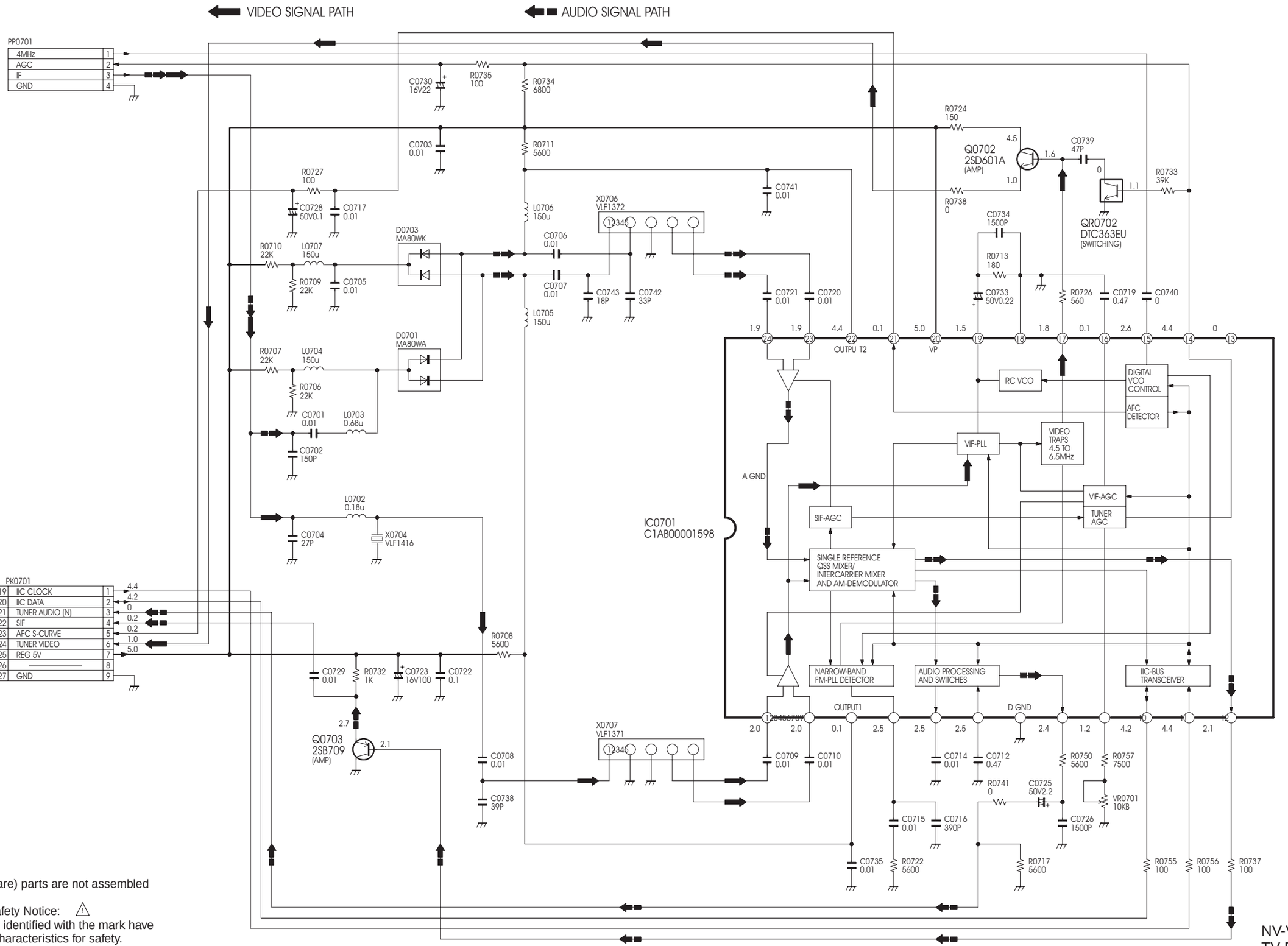
When replacing any of these components use only the same type.

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-VP25EC
VP30EC/EB/EBL/EP
TV DEMODULATOR PACK
SCHEMATIC DIAGRAM



Note:
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NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-VP30EF
TV DEMODULATOR PACK
SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

NAVIGATION
- MAIN PCB 1/2
- MAIN PCB 2/2
- MAIN PCB - I/O 1/2
- MAIN PCB - I/O 2/2
- MAIN PCB - SYSCON & SERVO 1/2
- MAIN PCB - SYSCON & SERVO 2/2

MAIN PCB I/O 2/2

Note:
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NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
MAIN PCB - I/O 1/2
SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

MAIN PCB - I/O 1/2

IIC DATA
IIC CLOCK
V_GND
PROG_H
CPSDMD OUT
AV1_R_OUT
AV1_L_OUT
B_AV2
G_AV2
R_AV2
IO_5V
BLINK
R_AV1
G_AV1
B_AV1
C_OUT
IIC CLOCK
V_IN
IIC DATA
NSW_5V
Y_OUT

JK4904 K2HA306B0071
JK4903 K1CB104B0017
IC4905 BCRAE0000023
LB4901 *JUJ0000000062
LB4902 *JUJ0000000062
LB4903 *JUJ0000000062
LB4904 *JUJ0000000062
LB4905 *JUJ0000000062
LB4906 *JUJ0000000062
LB4307 JUJ0000000062
LB4308 JUJ0000000062
LB4309 JUJ0000000062
LB4301 *JUJ0000000062
LB4302 *JUJ0000000062
LB4303 *JUJ0000000062
LB4304 *JUJ0000000062
LB4305 *JUJ0000000062
LB4306 *JUJ0000000062

P4301 K1KA23000044
1 V_OUT
2 V_GND
3 C_OUT
4 V_GND
5 R_OUT
6 G_OUT
7 B_OUT
8 D_GND
9 CKD
10 STAT
11 DSP_CLK
12 A_DIGITAL
13 TRAY_SW-
14 TRAY/TRY
15 TRAY_SW+
16 TRAY_MUTE
17 TRAY_DRV
18 TRAY_REF
19 A_GND
20 AUDIO_R
21 AUDIO_L
22 A_MUTE

TRAY_SW-
TRAY_TRY
TRAY_SW+
TRAY_MUTE
TRAY_DRV
TRAY_REF
DVD_R_OUT
DVD_L_OUT
DVD_MUTE
GND_DIG
CKD
STAT
DSP_CLK
PROG_H
NSW_5V
IIC_DATA
IIC_CLOCK
GND_IO
[BOTTOM]

IC4901 C1HB00001465
IC4902 C1HB00001465
IC4904 C1HB00001465
IC7301 C1AB00001404 (TDA9874AH)
QR4936 XWD121100L
TU7601 *EN64732701
DU7601 *VEP07A23U-SK

IIC DATA
IIC CLOCK
VIDEO OUT
SW_5V
REG_5V
DU7601 PIN24
TU7601 PIN14

REC_A_OUT
IO_5V
SW
P.FAIL
REG_5V
AUDIO_DEF_H
AFC_S
NSW_30V
DEC_R_OUT
DEC_L_OUT
TUN_A_OUT

NAVIGATION
MAIN PCB 1/2
MAIN PCB 2/2
MAIN PCB - I/O 1/2
MAIN PCB - I/O 2/2
MAIN PCB - SYSCON & SERVO 1/2
MAIN PCB - SYSCON & SERVO 2/2

Note:
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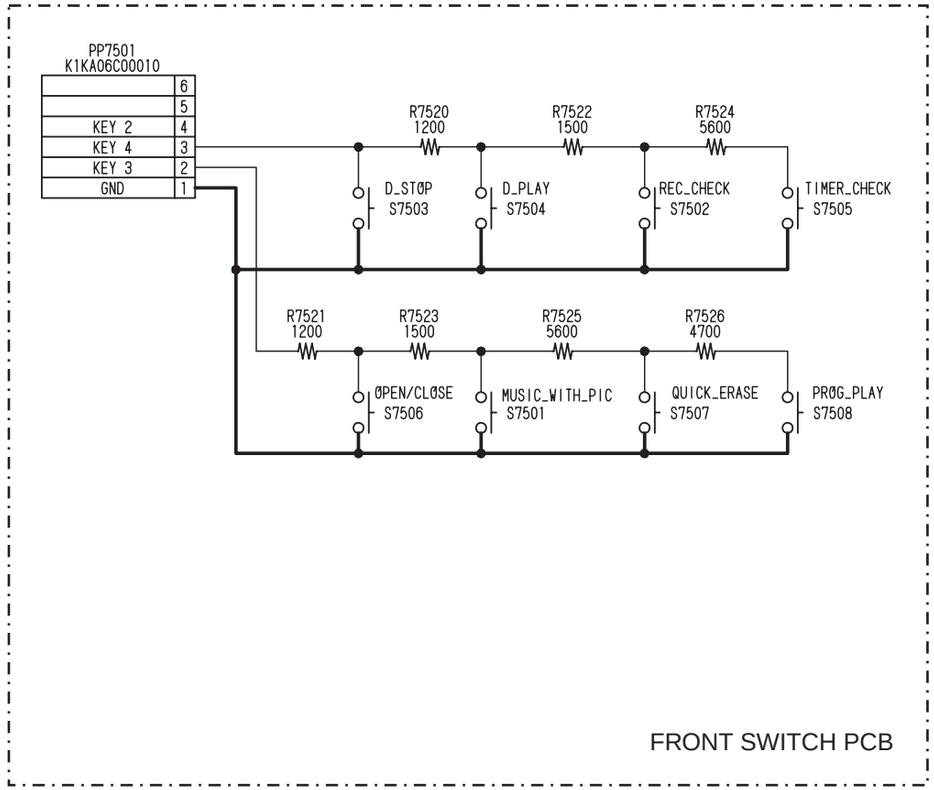
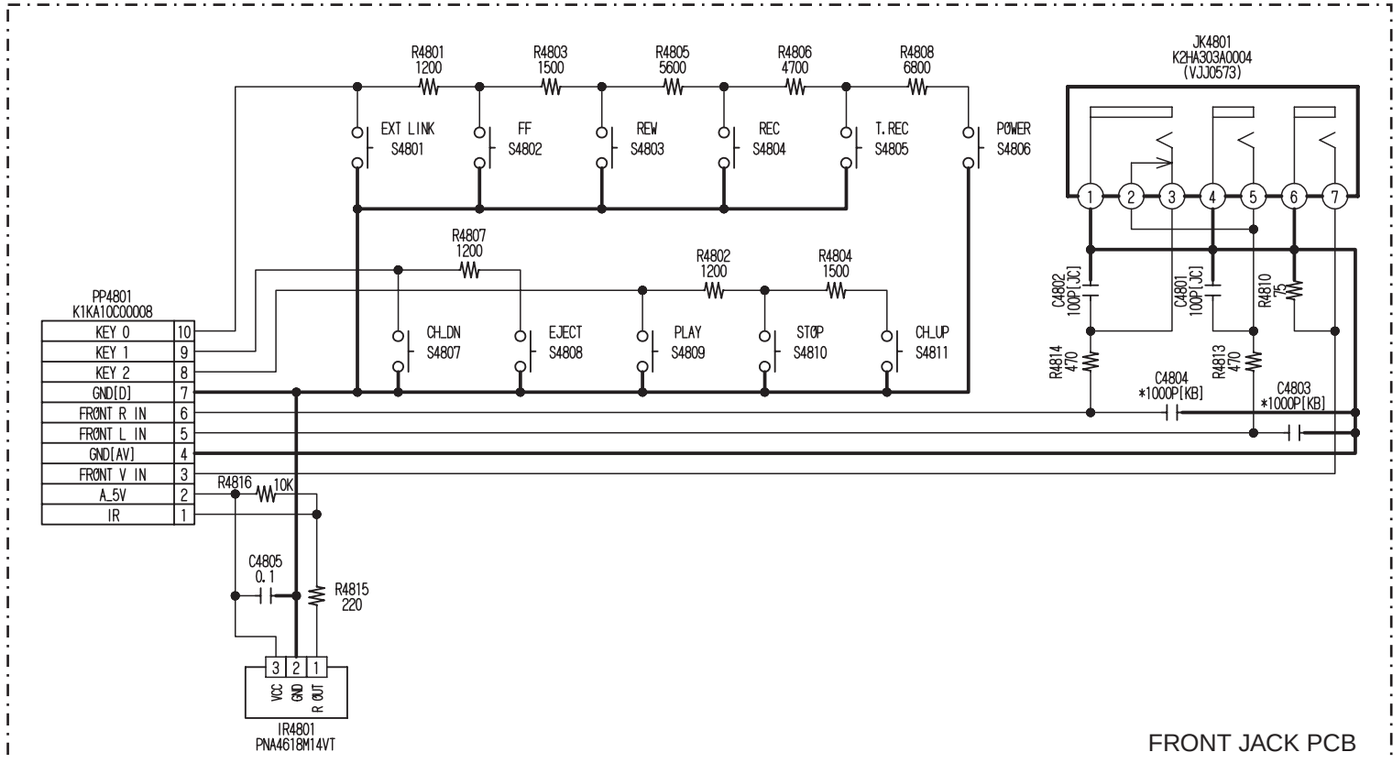
NV-VP25EC
NV-VP30EC/EB/EBL/EP/EF
MAIN PCB - I/O 2/2
SCHEMATIC DIAGRAM





Note:
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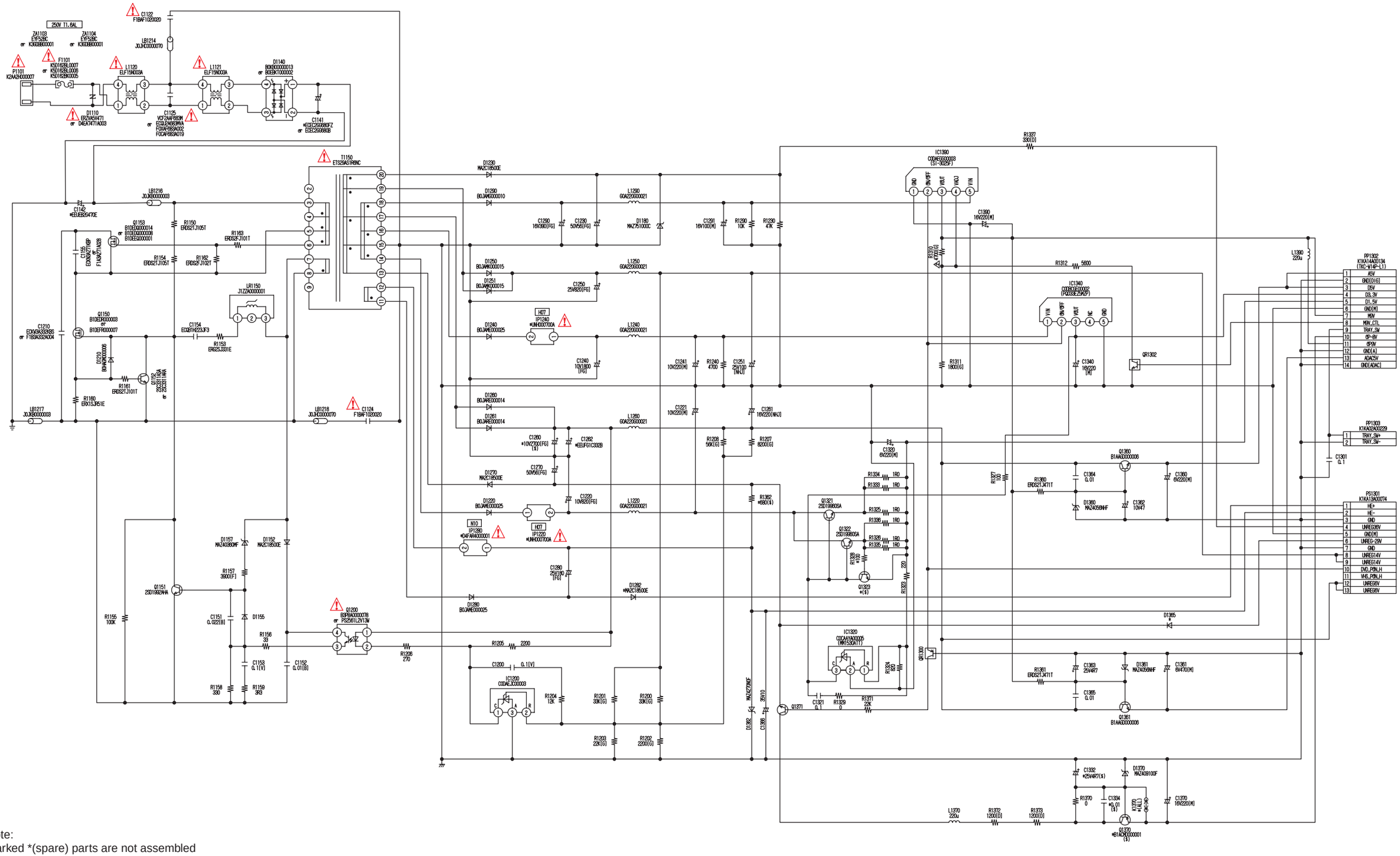
NV-VP25EC
VP30EC/EB/EBL/EP/EF
FRONT PANEL PCB
SCHEMATIC DIAGRAM



Note:
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NV-VP25EC
VP30EC/EB/EBL/EP/EF
POWER PCB
SCHEMATIC DIAGRAM

MAIN SIGNAL PATH

FP2501: FG3 1, FG2 2, FG2 3, FG1 4

IC2501 CXGB60000020 (MOTOR DRIVE)
1 BIAS1, 2 VIN1, 3 VIN2, 4 OPIN+, 5 OPIN-, 6 OPOUT, 7 GND(Pre), 8 FIN, 9 VCC(ch1.2), 10 MUTE12, 11 GND(ch1.2), 12 VO2-, 13 VO2+, 14 VO1-, 15 VO1+, 16 VO4+, 17 VO4-, 18 VO3+, 19 VO3-, 20 GND(ch3.4), 21 MUTE4, 22 VCC(ch3.4), 23 PREVCC, 24 VIN3, 25 BIAS2, 26 TRIN, 27 MUTE3, 28 LDCNT

R2502 15k
C2507 0.1
R2503 15k
C2506 0.1
C2508 0.1
(D+5V)
C2504 0.1
C2501 6.3V 220
(DGND)
R2501 100
C2510 0.1
C2513 0.1
C2503 16V22
R2507 6.8
C2505 0.1
C2509 16V10
C2502 16V100
R2505 82k
R2504 82k

(F-)
(F+)
(T-)
(T+)

TC2522
TC2523
SPINDLE MOTOR
M2501
C2511 0.1
TC2525
TC2524
M2502
C2512 0.1
RA2501 (47K×4)

SW2501 RSH1A048-A

FP5101: T+ 30, F+ 29, F- 28, T- 27, 3.3VHFM 26, GND 25, LD+(DVD) 24, GND 23, GND 22, RFP 21, RFN 20, F1(DVD) 19, F2(DVD) 18, GAINH/L 17, PIN(DVD) 16, VREF2.2(DVD) 15, TA(DVD) 14, TD(DVD) 13, TC(DVD) 12, TB(DVD) 11, VCC5V 10, FE1 9, GND 8, LD+(CD) 7, T1(CD) 6, VREF2.2(CD) 5, FE2(CD) 4, T2(CD) 3, PIN(CD) 2, GND 1

TC5125 TC5124 TC5123 TC5122 TC5121
C5151 0.1
C5152 10V10
D5151 MA2J728OOL
LB5106 JOJBC0000015
TC5120
LB5105 JOJBC0000015
TC5119 TC5118 TC5117 TC5116
R5124 4.7k
TC5115
TC5114
C5123 0.1
TC5113 TC5112 TC5111 TC5110 TC5109 TC510B
C5102 0.1
LB5101 JOJHC0000045
TC5107 TC5106 TC5105 TC5104 TC5103
TC5101
TC5102

TC5130 R5117 47k R5113 47k TC5129
L5101 ELJEA100KF
R5112 27
C5111 6.3V47
R5111 2.2
R5116 27
C5115 6.3V47
R5115 2.2
TC5127
C5103 0.1
C5101 16V10
R5114 22k
Q5111 2SB1115-T (LD DRIVE)
Q5115 2SB1115-T (LD DRIVE)

R5103 56
RA5102 (56×4)
R5101 56
R5121 56
R5122 56
R5123 56
R5102 56
RA5101 56
RA5103 56
R5152 1k

TP5101 TP5102 TP5103 TP5104 TP5113 CP5102 TP5105 TP5106 TP5107 TP5108 CP5103 CP5101 TP5109 TP5110 TP5111 TP5112 TP5114 CP5104 CP5105 TP5115 TP5116 TP5118 TP5125 TP5123 TP5137 TP5136 TP5117 TP5124 TP5130 TP5119 TP5120 TP5132 TP5126 TP5129 TP5128 TP5127 TP5131 TP5121 TP5122 TP5133 TP5134 TP5135

R5107 0
R5108 0
R5109 0
R5120 0

FP5102: 1 FG1, 2 FG3, 3 DGND, 4 DGND, 5 MUTE4, 6 D+5V, 7 D+5V, 8 TRAYIN(D+5V), 9 M+9V, 10 M+9V, 11 M+9V, 12 MGND, 13 MGND, 14 MGND, 15 TRAYREF, 16 MUTE12, 17 MUTE3, 18 DMV, 19 FOIN, 20 TRIN, 21 SPDIN, 22 TRVIN, 23 INSW, 24 LDCUR, 25 VHALF, 26 AGND, 27 PIN(CD), 28 T2(CD), 29 FE2(CD), 30 T1(CD), 31 LPCO2, 32 AGND, 33 FE1(CD), 34 VCC+5V, 35 TB(DVD), 36 TC(DVD), 37 TD(DVD), 38 TA(DVD), 39 TRAY/TRV, 40 VREF2.2V, 41 PIN(DVD), 42 GAINH/L, 43 F2(DVD), 44 F1(DVD), 45 RFN, 46 RFP, 47 AGND, 48 LPCO1, 49 AGND, 50 3.3VHFM

Note:
Marked *(spare) parts are not assembled

Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.

NV-VP25EC
VP30EC/EB/EBL/EP/EF
TERMINAL PCB
SCHEMATIC DIAGRAM

INPUT CONDITION								Video Output Result LA73023 settings									Audio Output Results		AN3656 settings				Mute signal
POWER	AV2 SELECT	EE/ VV	DVD/VCR MODE	OSD ON(H)	DVD RGB	INPUT- / pro-grammed CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	DVD/AV2 SELECT	Video to YC	AV3/DVD SELECT	YC-out OUT	AV1 Out	AV2 Out	REC/ PB	Input Select	AV1 output Select	AV2 output Select	Mute (H)
	Function menu				Function menu		AV2-8 in	V-OUTSEL	V-DECSEL	AV1-8	AV2-8 out	RGB OFF(H)	DVD(L)	V-INSEL	SW4,5	YC-out			A-REC/PB	A-INSEL	A-OUTSEL	A-DECSEL	
OFF	---	---	---	---	---	---	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
							M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
VPS STAND BY or EXT LINK STAND BY	EXT EXT LINK 1 or EXT LINK 2	---	VCR	L	---	NO.TU	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
							M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
						AV1	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV2IN	AV1IN	REC	AV1in (001)	BSmon	AV1in	L
							M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV1(100)	d.c.	AV1	AV2IN	AV1IN	REC	AV1in (001)	BSmon	AV1in	L
						AV2	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
							M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
						AV3	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV2IN	AV1IN	REC	AV3in (011)	BSmon	AV1in	L
							M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	SW45(101)	AV3(01)	AV3	AV2IN	AV1IN	REC	AV3in (011)	BSmon	AV1in	L
				H	---	NO.TU	L	VCR OUT(00)	VCR OUT(00)	H	H	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	Mute	Mute	REC	TUN (000)	Hifi,Mix,Nor	AV1in	H
						AV1	L	VCR OUT(00)	VCR OUT(00)	H	H	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	Mute	Mute	REC	AV1in (001)	Hifi,Mix,Nor	AV1in	H
						AV2	L	VCR OUT(00)	VCR OUT(00)	H	H	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	Mute	Mute	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	H
						AV3	L	VCR OUT(00)	VCR OUT(00)	H	H	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	Mute	Mute	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	H
			DVD	---	OFF	NO.TU	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
							M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
						AV1	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
							M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	OFF(1)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
						AV2	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
							M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
						AV3	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
							M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	OFF(1)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
					ON	NO.TU	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
							M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
						AV1	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
							M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	ON(0)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
						AV2	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
							M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
						AV3	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
							M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	ON(0)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
	DECODER	---	VCR	L	---	NO.TU	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
							M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
						AV1	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV2IN	AV1IN	REC	AV1in (001)	BSmon	AV1in	L
							M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
						AV2	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
							M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
						AV3	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV2IN	AV1IN	REC	AV3in (011)	BSmon	AV1in	L
							M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	SW45(101)	AV3(01)	AV3	AV2IN	AV1IN	REC	AV3in (011)	BSmon	AV1in	L
				H	---	NO.TU	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	Mute	Mute	REC	TUN (000)	Hifi,Mix,Nor	AV1in	H
						AV1	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	Mute	Mute	REC	AV1in (001)	Hifi,Mix,Nor	AV1in	H
							M/H	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	Mute	Mute	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	H
						AV2	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	Mute	Mute	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	H
						AV3	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	Mute	Mute	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	H

INPUT CONDITION								Video Output Result LA73023 settings									Audio Output Results		AN3656 settings				Mute signal
POWER	AV2 SELECT	EE/ VV	DVD/VCR MODE	OSD ON(H)	DVD RGB	INPUT- / pro-grammed CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	DVD/AV2 SELECT	Video to YC	AV3/DVD SELECT	YC-out OUT	AV1 Out	AV2 Out	REC/ PB	Input Select	AV1 output Select	AV2 output Select	Mute (H)
	Function menu				Function menu		AV2-8 in	V-OUTSEL	V-DECSEL	AV1-8	AV2-8 out	RGB OFF(H)	DVD(L)	V-INSEL	SW4,5	YC-out			A-REC/PB	A-INSEL	A-OUTSEL	A-DECSEL	
			DVD	---	OFF	NO.TU	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	AV1IN	REC	TUN (000)	Nor (10)	AV1in	L
						AV1	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV1(100)	d.c.	AV1	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
							M/H	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
						AV2	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV2in (010)	Nor (10)	AV1in	L
						AV3	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	AV1IN	REC	AV3in (011)	Nor (10)	AV1in	L
					ON	NO.TU	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	AV1IN	REC	TUN (000)	Nor (10)	AV1in	L
						AV1	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV1(100)	d.c.	AV1	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
							M/H	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
						AV2	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV2in (010)	Nor (10)	AV1in	L
						AV3	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	AV1IN	REC	AV3in (011)	Nor (10)	AV1in	L
P.ON	EXT	EE	VCR	L	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
						AV1	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	OUTSEL	L
	or					AV2	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV2IN	REC	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
						AV3	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV3IN	REC	AV3in (011)	Hifi,Mix,Nor	OUTSEL	L
	EXTLINK1					DVD	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
				H	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
	or					AV1	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	OUTSEL	L
						AV2	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV2IN	REC	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
	EXTLINK2					AV3	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	63	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV3IN	REC	AV3in (011)	Hifi,Mix,Nor	OUTSEL	L
						DVD	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
		VV	VCR	L	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB VHS	PB VHS	PB VHS	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
						AV1	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV1in (001)	Hifi,Mix,Nor	OUTSEL	L
						AV2	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
						AV3	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV3in (011)	Hifi,Mix,Nor	OUTSEL	L
						DVD	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB VHS	PB VHS	PB VHS	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
				H	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB VHS	PB VHS	PB VHS	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
						AV1	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV1in (001)	Hifi,Mix,Nor	OUTSEL	L
						AV2	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
						AV3	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV3in (011)	Hifi,Mix,Nor	OUTSEL	L
						DVD	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB VHS	PB VHS	PB VHS	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
		EE	DVD	---	OFF	NO.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
						AV1	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
						AV2	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
						AV3	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
						DVD	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Nor (10)	DVD(EXT4)	L
					ON	NO.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
						AV1	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
						AV2	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
						AV3	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
						DVD	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Nor (10)	DVD(EXT4)	L
		VV	DVD	---	OFF	NO.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	MUTE(111)	d.c.	PB	DVD	DVD	PB VHS	TUN (000)	Nor (10)	DVD(EXT4)	L
						AV1	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	MUTE(111)	d.c.	PB	DVD	DVD	PB VHS	AV1in (001)	Nor (10)	DVD(EXT4)	L
						AV2	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	MUTE(111)	d.c.	PB	DVD	DVD	PB VHS	AV2in (010)	Nor (10)	DVD(EXT4)	L

INPUT CONDITION								Video Output Result LA73023 settings								Audio Output Results		AN3656 settings				Mute signal
POWER	AV2 SELECT	EE/ VV	DVD/VCR MODE	OSD ON(H)	DVD RGB	INPUT- / pro-grammed CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	DVD/AV2 SELECT	Video to YC	AV3/DVD SELECT	YC-out OUT	AV1 Out	AV2 Out	REC/ PB	Input Select	AV1 output Select	AV2 output Select	Mute (H)
	Function menu				Function menu		AV2-8 in	V-OUTSEL	V-DECSEL	AV1-8	AV2-8 out	RGB OFF(H)	DVD(L)	V-INSEL	SW4,5	YC-out			A-REC/PB	A-INSEL	A-OUTSEL	A-DECSEL	
						AV3	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	MUTE(111)	d.c.	PB	DVD	DVD	PB VHS	AV3in (011)	Nor (10)	DVD(EXT4)	L
						DVD	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	MUTE(111)	d.c.	PB	DVD	DVD	PB VHS	DVD (100)	Nor (10)	DVD(EXT4)	L
					ON	NO.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	MUTE(111)	d.c.	PB	DVD	DVD	PB VHS	TUN (000)	Nor (10)	DVD(EXT4)	L
						AV1	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	MUTE(111)	d.c.	PB	DVD	DVD	PB VHS	AV1in (001)	Nor (10)	DVD(EXT4)	L
						AV2	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	MUTE(111)	d.c.	PB	DVD	DVD	PB VHS	AV2in (010)	Nor (10)	DVD(EXT4)	L
						AV3	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	MUTE(111)	d.c.	PB	DVD	DVD	PB VHS	AV3in (011)	Nor (10)	DVD(EXT4)	L
						DVD	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	MUTE(111)	d.c.	PB	DVD	DVD	PB VHS	DVD (100)	Nor (10)	DVD(EXT4)	L
P.ON	DECODER	EE	VCR	L	---	NO.TU	L	VCR OUT(00)	TUN IN(01)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	TUN	L
							M/H	VCR OUT(00)	TUN IN(01)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	TUN	REC	AV2in (010)	Hifi,Mix,Nor	TUN	L
						AV1	L	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	AV1in	L
							M/H	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
						AV2	L	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
							M/H	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
						AV3	L	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV1IN	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	L
							M/H	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV1IN	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	L
						DVD	---	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Hifi,Mix,Nor	AV1in	L
				H	---	NO.TU	L	VCR OUT(00)	TUN IN(01)	H	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	TUN	L
							M/H	VCR OUT(00)	TUN IN(01)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	TUN	REC	AV2in (010)	Hifi,Mix,Nor	TUN	L
						AV1	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	AV1in	L
							M/H	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
						AV2	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
						AV3	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV1IN	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	L
						DVD	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Hifi,Mix,Nor	AV1in	L
		VV	VCR	---	---	NO.TU	L	VCR OUT(00)	TUN IN(01)	*6[M/H]	L	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB	TUN	PB VHS	TUN (000)	Hifi,Mix,Nor	TUN	L
							M/H	VCR OUT(00)	TUN IN(01)	*6[M/H]	L	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB	TUN	PB VHS	AV2in (010)	Hifi,Mix,Nor	TUN	L
						AV1	---	VCR OUT(00)	AV1 IN(10)	*6[M/H]	L	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB	AV1IN	PB VHS	AV1in (001)	Hifi,Mix,Nor	AV1in	L
						AV2	---	VCR OUT(00)	AV1 IN(10)	*6[M/H]	L	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB	AV1IN	PB VHS	AV2in (010)	Hifi,Mix,Nor	AV1in	L
						AV3	---	VCR OUT(00)	AV1 IN(10)	*6[M/H]	L	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB	AV1IN	PB VHS	AV3in (011)	Hifi,Mix,Nor	AV1in	L
						DVD	---	VCR OUT(00)	AV1 IN(10)	*6[M/H]	L	OFF(1)	H (AV2)	MUTE(111)	d.c.	PB	PB	AV1IN	PB VHS	DVD (100)	Hifi,Mix,Nor	AV1in	L
P.ON	DECODER	EE	DVD	---	OFF	NO.TU	L	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	TUN	REC	TUN (000)	Nor (10)	TUN	L
							M/H	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	TUN	REC	AV2in (010)	Nor (10)	TUN	L
						AV1	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV1(100)	d.c.	AV1	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
						AV2	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV2in (010)	Nor (10)	AV1in	L
						AV3	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	AV1IN	REC	AV3in (011)	Nor (10)	AV1in	L
						DVD	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Nor (10)	AV1in	L
					ON	NO.TU	L	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	TUN	REC	TUN (000)	Nor (10)	TUN	L
							M/H	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	TUN	REC	AV2in (010)	Nor (10)	TUN	L
						AV1	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV1(100)	d.c.	AV1	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
						AV2	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV2in (010)	Nor (10)	AV1in	L
						AV3	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	AV1IN	REC	AV3in (011)	Nor (10)	AV1in	L
						DVD	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Nor (10)	AV1in	L
		VV	DVD	---	OFF	NO.TU	---	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	OFF(1)	L (DVD)	MUTE(111)	d.c.	PB	DVD	TUN	PB VHS	TUN (000)	Nor (10)	TUN	L
						AV1	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	MUTE(111)	d.c.	PB	DVD	AV1IN	PB VHS	AV1in (001)	Nor (10)	AV1in	L

INPUT CONDITION								Video Output Result LA73023 settings								Audio Output Results		AN3656 settings				Mute signal
POWER	AV2 SELECT	EE/ VV	DVD/VCR MODE	OSD ON(H)	DVD RGB	INPUT- / pro-grammed CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	DVD/AV2 SELECT	Video to YC	AV3/DVD SELECT	YC-out OUT	AV1 Out	AV2 Out	REC/ PB	Input Select	AV1 output Select	AV2 output Select	Mute (H)
	Function menu				Function menu		AV2-8 in	V-OUTSEL	V-DECSEL	AV1-8	AV2-8 out	RGB OFF(H)	DVD(L)	V-INSEL	SW4,5	YC-out			A-REC/PB	A-INSEL	A-OUTSEL	A-DECSEL	
						AV2	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	MUTE(111)	d.c.	PB	DVD	AV1IN	PB VHS	AV2in (010)	Nor (10)	AV1in	L
						AV3	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	MUTE(111)	d.c.	PB	DVD	AV1IN	PB VHS	AV3in (011)	Nor (10)	AV1in	L
						DVD	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	MUTE(111)	d.c.	PB	DVD	AV1IN	PB VHS	DVD (100)	Nor (10)	AV1in	L
					ON	NO.TU	---	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	ON(0)	L (DVD)	MUTE(111)	d.c.	PB	DVD	TUN	PB VHS	TUN (000)	Nor (10)	TUN	L
						AV1	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	MUTE(111)	d.c.	PB	DVD	AV1IN	PB VHS	AV1in (001)	Nor (10)	AV1in	L
						AV2	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	MUTE(111)	d.c.	PB	DVD	AV1IN	PB VHS	AV2in (010)	Nor (10)	AV1in	L
						AV3	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	MUTE(111)	d.c.	PB	DVD	AV1IN	PB VHS	AV3in (011)	Nor (10)	AV1in	L
						DVD	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	MUTE(111)	d.c.	PB	DVD	AV1IN	PB VHS	DVD (100)	Nor (10)	AV1in	L

Remark:

NO.TU	Tuner position, DECODER OFF (e.g. ARD)
C+TU	Tuner position, DECODER ON (e.g. PREMI)
RGW SW	OFF = HIGH
RGW SW	ON = LOW
EE	Non-Playback signal
VV	Playback signal
INSEL	Inputselect= Audio Output signal from AN3655 at Line Out
***1[L]**	**In case of Personal Planner standby(not External Link), AV1 PB must not output 'M' or 'H'**
***2[H*] / *3[M/H]**	**AV2 PB must not output 'M' or 'H' if AV2 PB IN is 'M' or 'H'.**
***3[M/H]**	**State of AV2PB output should be decided by distinction of PB CTL.**
***4**	**In case of EXT LINK (1) mode AV2 PB(H) shall be low, in case of ex. EXTLINK (1) follow the result of DVD**
***5[M/H]**	**State of AV PB should be decided by 16:9 information from DVD.**
***6[M/H]**	**State of AV2PB output should be decided by distinction of PB CTL.**
***7[M/H]**	**State of AV1PB output should be decided by result of AV2PB input.**

INPUT CONDITION									Video Output Result LA73023 settings									Audio Output Results		AN3656 settings				Mute signal
POWER	AV2 SELECT	TV/ VTR	EE/ VV	DVD/VCR MODE	OSD ON(H)	DVD RGB	INPUT- / pro-grammed CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	DVD/AV2 SELECT	Video to YC	AV3/DVD SELECT	YC-out OUT	AV1 Out	AV2 Out	REC/ PB	Input Select	AV1 output Select	AV2 output Select	Mute (H)
	Function menu	AV link				Function menu		AV2-8 in	V-OUTSEL	V-DECSEL	AV1-8	AV2-8 out	RGB OFF(H)	DVD(L)	V-INSEL	SW4,5	YC-out			A-REC/PB	A-INSEL	A-OUTSEL	A-DECSEL	
OFF	---	---	---	--	--	---	--	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
VPS STAND BY or EXT LINK STAND BY	EXT or EXT LINK 1 or EXT LINK 2	---	---	VCR	L	---	NO.TU	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
							C+.TU	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
							AV1	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV2IN	AV1IN	REC	AV1in (001)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV1(100)	d.c.	AV1	AV2IN	AV1IN	REC	AV1in (001)	BSmon	AV1in	L
							AV2	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
							AV3	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV2IN	AV1IN	REC	AV3in (011)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	SW45(101)	AV3(01)	AV3	AV2IN	AV1IN	REC	AV3in (011)	BSmon	AV1in	L
					H	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	H	H	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	Mute	Mute	REC	TUN (000)	Hifi,Mix,Nor	AV1in	H
							C+.TU	---	VCR OUT(00)	VCR OUT(00)	H	H	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	Mute	Mute	REC	TUN (000)	Hifi,Mix,Nor	AV1in	H
							AV1	---	VCR OUT(00)	VCR OUT(00)	H	H	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	Mute	Mute	REC	AV1in (001)	Hifi,Mix,Nor	AV1in	H
							AV2	---	VCR OUT(00)	VCR OUT(00)	H	H	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	Mute	Mute	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	H
							AV3	---	VCR OUT(00)	VCR OUT(00)	H	H	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	Mute	Mute	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	H
				DVD	---	OFF	NO.TU	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
								M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
							C+.TU	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
								M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
							AV1	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
								M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	OFF(1)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
							AV2	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
								M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
							AV3	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
								M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	OFF(1)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
						ON	NO.TU	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
								M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
							C+.TU	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
								M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
							AV1	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
								M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	ON(0)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
							AV2	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
								M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
							AV3	L	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
								M/H	DVD OUT(11)	DVD OUT(11)	*5[M/H]	L	ON(0)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
	DECODER	---	---	VCR	L	---	NO.TU	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
							C+.TU	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
							AV1	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV2IN	AV1IN	REC	AV1in (001)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L

INPUT CONDITION									Video Output Result LA73023 settings									Audio Output Results		AN3656 settings				Mute signal
POWER	AV2 SELECT	TV/ VTR	EE/ VV	DVD/VCR MODE	OSD ON(H)	DVD RGB	INPUT- / pro-grammed CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	DVD/AV2 SELECT	Video to YC	AV3/DVD SELECT	YC-out OUT	AV1 Out	AV2 Out	REC/ PB	Input Select	AV1 output Select	AV2 output Select	Mute (H)
	Function menu	AV link				Function menu		AV2-8 in	V-OUTSEL	V-DECSEL	AV1-8	AV2-8 out	RGB OFF(H)	DVD(L)	V-INSEL	SW4,5	YC-out			A-REC/PB	A-INSEL	A-OUTSEL	A-DECSEL	
							AV2	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
							AV3	L	AV2 IN(01)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV2IN	AV1IN	REC	AV3in (011)	BSmon	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	SW45(101)	AV3(01)	AV3	AV2IN	AV1IN	REC	AV3in (011)	BSmon	AV1in	L
					H	---	NO.TU	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	Mute	Mute	REC	TUN (000)	Hifi,Mix,Nor	AV1in	H
							C+.TU	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	Mute	Mute	REC	TUN (000)	Hifi,Mix,Nor	AV1in	H
							AV1	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	Mute	Mute	REC	AV1in (001)	Hifi,Mix,Nor	AV1in	H
								M/H	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	Mute	Mute	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	H
							AV2	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	Mute	Mute	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	H
							AV3	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	Mute	Mute	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	H
				DVD	---	OFF	NO.TU	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	AV1IN	REC	TUN (000)	Nor (10)	AV1in	L
							C+.TU	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	AV1IN	REC	TUN (000)	Nor (10)	AV1in	L
							AV1	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV1(100)	d.c.	AV1	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
								M/H	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
							AV2	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV2in (010)	Nor (10)	AV1in	L
							AV3	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	AV1IN	REC	AV3in (011)	Nor (10)	AV1in	L
						ON	NO.TU	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	AV1IN	REC	TUN (000)	Nor (10)	AV1in	L
							C+.TU	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	AV1IN	REC	TUN (000)	Nor (10)	AV1in	L
							AV1	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV1(100)	d.c.	AV1	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
								M/H	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
							AV2	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV2in (010)	Nor (10)	AV1in	L
							AV3	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	AV1IN	REC	AV3in (011)	Nor (10)	AV1in	L
P.ON	EXT	TV	EE	VCR	L	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
							C+.TU	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
	or						AV1	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	OUTSEL	L
							AV2	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV2IN	REC	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
	EXTLINK1						AV3	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV3IN	REC	AV3in (011)	Hifi,Mix,Nor	OUTSEL	L
							DVD	---	VCR OUT(00)	VCR OUT(00)	L	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
	or				H	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
							C+.TU	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
	EXTLINK2						AV1	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	OUTSEL	L
							AV2	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV2IN	REC	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
							AV3	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV3IN	REC	AV3in (011)	Hifi,Mix,Nor	OUTSEL	L
							DVD	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
		VTR	EE	VCR	L	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
							C+.TU	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
							AV1	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	OUTSEL	L
							AV2	L	VCR OUT(00)	VCR OUT(00)	H	H	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV2IN	REC	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
								M/H	VCR OUT(00)	VCR OUT(00)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV2IN	REC	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
							AV3	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV3IN	REC	AV3in (011)	Hifi,Mix,Nor	OUTSEL	L
						OFF	DVD	---	VCR OUT(00)	VCR OUT(00)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
					NO	ON	DVD	---	VCR OUT(00)	VCR OUT(00)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
					ANY		DVD	---	VCR OUT(00)	VCR OUT(00)	H(1)	*2[H]	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Hifi,Mix,Nor	OUTSEL	L

INPUT CONDITION									Video Output Result LA73023 settings									Audio Output Results		AN3656 settings				Mute signal
POWER	AV2 SELECT	TV/ VTR	EE/ VV	DVD/VCR MODE	OSD ON(H)	DVD RGB	INPUT- / pro-grammed CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	DVD/AV2 SELECT	Video to YC	AV3/DVD SELECT	YC-out OUT	AV1 Out	AV2 Out	REC/ PB	Input Select	AV1 output Select	AV2 output Select	Mute (H)
	Function menu	AV link				Function menu		AV2-8 in	V-OUTSEL	V-DECSEL	AV1-8	AV2-8 out	RGB OFF(H)	DVD(L)	V-INSEL	SW4,5	YC-out			A-REC/PB	A-INSEL	A-OUTSEL	A-DECSEL	
					H	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
							C+.TU	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
							AV1	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	OUTSEL	L
							AV2	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV2IN	REC	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
							AV3	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV3IN	REC	AV3in (011)	Hifi,Mix,Nor	OUTSEL	L
							DVD	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
			VV	VCR	L	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
							C+.TU	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
							AV1	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV1in (001)	Hifi,Mix,Nor	OUTSEL	L
							AV2	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
							AV3	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV3in (011)	Hifi,Mix,Nor	OUTSEL	L
							DVD	---	VCR OUT(00)	VCR OUT(00)	*6[M/H]	*3[M/H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
					H	---	NO.TU	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
							C+.TU	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	TUN (000)	Hifi,Mix,Nor	OUTSEL	L
							AV1	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV1in (001)	Hifi,Mix,Nor	OUTSEL	L
							AV2	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV2in (010)	Hifi,Mix,Nor	OUTSEL	L
							AV3	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	AV3in (011)	Hifi,Mix,Nor	OUTSEL	L
							DVD	---	VCR OUT(00)	VCR OUT(00)	H	*2[H]	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB VHS	PB VHS	PB VHS	DVD (100)	Hifi,Mix,Nor	OUTSEL	L
		---	EE	DVD	---	OFF	NO.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
							C+.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
							AV1	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
							AV2	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
							AV3	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
							DVD	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Nor (10)	DVD(EXT4)	L
						ON	NO.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
							C+.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	DVD	REC	TUN (000)	Nor (10)	DVD(EXT4)	L
							AV1	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	AV1(100)	d.c.	AV1	DVD	DVD	REC	AV1in (001)	Nor (10)	DVD(EXT4)	L
							AV2	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*4	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	DVD	REC	AV2in (010)	Nor (10)	DVD(EXT4)	L
							AV3	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	DVD	REC	AV3in (011)	Nor (10)	DVD(EXT4)	L
							DVD	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	DVD	REC	DVD (100)	Nor (10)	DVD(EXT4)	L
		---	VV	DVD	---	OFF	NO.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	TUN (000)	Nor (10)	DVD(EXT4)	L
							C+.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	TUN (000)	Nor (10)	DVD(EXT4)	L
							AV1	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	AV1in (001)	Nor (10)	DVD(EXT4)	L
							AV2	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	AV2in (010)	Nor (10)	DVD(EXT4)	L
							AV3	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	AV3in (011)	Nor (10)	DVD(EXT4)	L
							DVD	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	DVD (100)	Nor (10)	DVD(EXT4)	L
						ON	NO.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	TUN (000)	Nor (10)	DVD(EXT4)	L
							C+.TU	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	TUN (000)	Nor (10)	DVD(EXT4)	L
							AV1	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	AV1in (001)	Nor (10)	DVD(EXT4)	L
							AV2	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	AV2in (010)	Nor (10)	DVD(EXT4)	L
							AV3	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	AV3in (011)	Nor (10)	DVD(EXT4)	L
							DVD	---	DVD OUT(11)	DVD OUT(11)	*5[M/H]	*5[M/H]	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	DVD	PB VHS	DVD (100)	Nor (10)	DVD(EXT4)	L
P.ON	DECODER	TV	EE	VCR	L	---	NO.TU	L	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	AV1IN	REC	TUN (000)	Hifi,Mix,Nor	AV1in	L

INPUT CONDITION								Video Output Result LA73023 settings									Audio Output Results		AN3656 settings				Mute signal
POWER	AV2 SELECT	TV/ VTR	EE/ VV	DVD/VCR MODE	OSD ON(H)	DVD RGB	INPUT- / pro-grammed CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	DVD/AV2 SELECT	Video to YC	AV3/DVD SELECT	YC-out OUT	AV1 Out	AV2 Out	REC/ PB	Input Select	AV1 output Select	AV2 output Select	Mute (H)
	Function menu	AV link				Function menu		AV2-8 in	V-OUTSEL	V-DECSEL	AV1-8	AV2-8 out	RGB OFF(H)	DVD(L)	V-INSEL	SW4,5	YC-out			A-REC/PB	A-INSEL	A-OUTSEL	A-DECSEL	
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	TUN(001)	d.c.	TUN	AV2IN	AV1IN	REC	TUN (000)	BSmon	AV1in	L
							C+.TU	L	VCR OUT(00)	TUN IN(01)	L	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	TUN	L
								M/H	VCR OUT(00)	TUN IN(01)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	TUN	REC	AV2in (010)	Hifi,Mix,Nor	TUN	L
							AV1	L	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
							AV2	L	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	BSmon	AV1in	L
							AV3	L	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV1IN	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	SW45(101)	AV3(01)	AV3	AV2IN	AV1IN	REC	AV3in (011)	BSmon	AV1in	L
							DVD	L	VCR OUT(00)	AV1 IN(10)	L	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Hifi,Mix,Nor	AV1in	L
								M/H	AV2 IN(01)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	SW45(101)	DVD(00)	DVD	AV2IN	AV1IN	REC	DVD (100)	BSmon	AV1in	L
					H	---	NO.TU	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	AV1IN	REC	TUN (000)	Hifi,Mix,Nor	AV1in	L
							C+.TU	L	VCR OUT(00)	TUN IN(01)	H	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	TUN	L
								M/H	VCR OUT(00)	TUN IN(01)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	TUN	REC	AV2in (010)	Hifi,Mix,Nor	TUN	L
							AV1	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	AV1in	L
								M/H	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
							AV2	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
							AV3	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV1IN	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	L
							DVD	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Hifi,Mix,Nor	AV1in	L
		VTR	EE	VCR	L	---	NO.TU	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	AV1IN	REC	TUN (000)	Hifi,Mix,Nor	AV1in	L
							C+.TU	L	VCR OUT(00)	TUN IN(01)	H	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	TUN	L
								M/H	VCR OUT(00)	TUN IN(01)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	TUN	REC	AV2in (010)	Hifi,Mix,Nor	TUN	L
							AV1	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	AV1in	L
								M/H	VCR OUT(00)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
							AV2	L	VCR OUT(00)	AV1 IN(10)	H	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
								M/H	VCR OUT(00)	AV1 IN(10)	*7[M/H]	L	ON(0)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
							AV3	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV1IN	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	L
								M/H	VCR OUT(00)	AV1 IN(10)	*7[M/H]	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV1IN	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	L
						OFF	DVD	---	VCR OUT(00)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Hifi,Mix,Nor	AV1in	L
					NO	ON		---	VCR OUT(00)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Hifi,Mix,Nor	AV1in	L
					ANY			---	VCR OUT(00)	AV1 IN(10)	H(1)	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Hifi,Mix,Nor	AV1in	L
					H	---	NO.TU	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	AV1IN	REC	TUN (000)	Hifi,Mix,Nor	AV1in	L
							C+.TU	L	VCR OUT(00)	TUN IN(01)	H	L	OFF(1)	H (AV2)	TUN(001)	d.c.	TUN	TUN	TUN	REC	TUN (000)	Hifi,Mix,Nor	TUN	L
								M/H	VCR OUT(00)	TUN IN(01)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	TUN	REC	AV2in (010)	Hifi,Mix,Nor	TUN	L
							AV1	L	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV1(100)	d.c.	AV1	AV1IN	AV1IN	REC	AV1in (001)	Hifi,Mix,Nor	AV1in	L
								M/H	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
							AV2	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	AV2(011)	d.c.	AV2	AV2IN	AV1IN	REC	AV2in (010)	Hifi,Mix,Nor	AV1in	L
							AV3	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	H (AV2)	SW45(101)	AV3(01)	AV3	AV3IN	AV1IN	REC	AV3in (011)	Hifi,Mix,Nor	AV1in	L
							DVD	---	VCR OUT(00)	AV1 IN(10)	H	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Hifi,Mix,Nor	AV1in	L
			VV	VCR	---	---	NO.TU	---	VCR OUT(00)	AV1 IN(10)	*6[M/H]	L	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB	AV1IN	PB VHS	TUN (000)	Hifi,Mix,Nor	AV1in	L
							C+.TU	---	VCR OUT(00)	TUN IN(01)	*6[M/H]	L	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB	TUN	PB VHS	TUN (000)	Hifi,Mix,Nor	TUN	L
							AV1	---	VCR OUT(00)	AV1 IN(10)	*6[M/H]	L	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB	AV1IN	PB VHS	AV1in (001)	Hifi,Mix,Nor	AV1in	L
							AV2	---	VCR OUT(00)	AV1 IN(10)	*6[M/H]	L	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB	AV1IN	PB VHS	AV2in (010)	Hifi,Mix,Nor	AV1in	L

INPUT CONDITION									Video Output Result LA73023 settings									Audio Output Results		AN3656 settings				Mute signal
POWER	AV2 SELECT	TV/ VTR	EE/ VV	DVD/VCR MODE	OSD ON(H)	DVD RGB	INPUT- / pro-grammed CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	DVD/AV2 SELECT	Video to YC	AV3/DVD SELECT	YC-out OUT	AV1 Out	AV2 Out	REC/ PB	Input Select	AV1 output Select	AV2 output Select	Mute (H)
	Function menu	AV link				Function menu		AV2-8 in	V-OUTSEL	V-DECSEL	AV1-8	AV2-8 out	RGB OFF(H)	DVD(L)	V-INSEL	SW4,5	YC-out			A-REC/PB	A-INSEL	A-OUTSEL	A-DECSEL	
							AV3	---	VCR OUT(00)	AV1 IN(10)	*6[M/H]	L	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB	AV1IN	PB VHS	AV3in (011)	Hifi,Mix,Nor	AV1in	L
							DVD	---	VCR OUT(00)	AV1 IN(10)	*6[M/H]	L	OFF(1)	H (AV2)	Mute (111)	d.c.	PB	PB	AV1IN	PB VHS	DVD (100)	Hifi,Mix,Nor	AV1in	L
		---	EE	DVD	---	OFF	NO.TU	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	AV1IN	REC	TUN (000)	Nor (10)	AV1in	L
							C+.TU	L	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	OFF(1)	L (DVD)	TUN(001)	d.c.	TUN	DVD	TUN	REC	TUN (000)	Nor (10)	TUN	L
								M/H	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	TUN	REC	AV2in (010)	Nor (10)	TUN	L
							AV1	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV1(100)	d.c.	AV1	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
								M/H	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV2in (010)	Nor (10)	AV1in	L
							AV2	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV2in (010)	Nor (10)	AV1in	L
							AV3	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	AV1IN	REC	AV3in (011)	Nor (10)	AV1in	L
							DVD	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Nor (10)	AV1in	L
						ON	NO.TU	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	AV1IN	REC	TUN (000)	Nor (10)	AV1in	L
							C+.TU	L	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	ON(0)	L (DVD)	TUN(001)	d.c.	TUN	DVD	TUN	REC	TUN (000)	Nor (10)	TUN	L
								M/H	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	TUN	REC	AV2in (010)	Nor (10)	TUN	L
							AV1	L	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV1(100)	d.c.	AV1	DVD	AV1IN	REC	AV1in (001)	Nor (10)	AV1in	L
								M/H	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV2in (010)	Nor (10)	AV1in	L
							AV2	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	AV2(011)	d.c.	AV2	DVD	AV1IN	REC	AV2in (010)	Nor (10)	AV1in	L
							AV3	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	SW45(101)	AV3(01)	AV3	DVD	AV1IN	REC	AV3in (011)	Nor (10)	AV1in	L
							DVD	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	SW45(101)	DVD(00)	DVD	DVD	AV1IN	REC	DVD (100)	Nor (10)	AV1in	L
		---	VV	DVD	---	OFF	NO.TU	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	AV1IN	PB VHS	TUN (000)	Nor (10)	AV1in	L
							C+.TU	---	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	TUN	PB VHS	TUN (000)	Nor (10)	TUN	L
							AV1	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	AV1IN	PB VHS	AV1in (001)	Nor (10)	AV1in	L
							AV2	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	AV1IN	PB VHS	AV2in (010)	Nor (10)	AV1in	L
							AV3	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	AV1IN	PB VHS	AV3in (011)	Nor (10)	AV1in	L
							DVD	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	OFF(1)	L (DVD)	Mute (111)	d.c.	PB	DVD	AV1IN	PB VHS	DVD (100)	Nor (10)	AV1in	L
						ON	NO.TU	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	AV1IN	PB VHS	TUN (000)	Nor (10)	AV1in	L
							C+.TU	---	DVD OUT(11)	TUN IN(01)	*5[M/H]	L	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	TUN	PB VHS	TUN (000)	Nor (10)	TUN	L
							AV1	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	AV1IN	PB VHS	AV1in (001)	Nor (10)	AV1in	L
							AV2	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	AV1IN	PB VHS	AV2in (010)	Nor (10)	AV1in	L
							AV3	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	AV1IN	PB VHS	AV3in (011)	Nor (10)	AV1in	L
							DVD	---	DVD OUT(11)	AV1 IN(10)	*5[M/H]	L	ON(0)	L (DVD)	Mute (111)	d.c.	PB	DVD	AV1IN	PB VHS	DVD (100)	Nor (10)	AV1in	L

Modifications from ZFD1->VP30

- AV1OUT:VCROUT(1-) -> VCROUT(00)
- AV1OUT:DVDOUT(00) -> DVDOUT(11)
- AV2OUT:AV1IN(01) -> AV1IN(10)
- AV2OUT:TUNIN(10) -> TUNIN(01)
- Added AV3/DVD select (SW4,5)
- INSEL: AV1(010) -> AV1(100)
- INSEL: DVD and AV3 changed to SW45(101)
- Removed AMUTE(H)
- Removed RFC audio (=AV1out)

Remark:

- NO.TU — Tuner position, DECODER OFF (e.g. ARD)
- C+TU — Tuner position, DECODER ON (e.g. PREMI)
- RGW SW — OFF = HIGH
- RGW SW — ON = LOW
- EE — Non-Playback signal
- VV — Playback signal
- INSEL — Inputselect= Audio Output signal from AN3656 at Line Out
- ***1[L]** — **In case of Personal Planner standby(not External Link), AV1 PB must not output 'M' or 'H'**
- ***2[H*] / *3[M/H]** — **AV2 PB must not output 'M' or 'H' if AV2 PB IN is 'M' or 'H'.**

INPUT CONDITION									Video Output Result LA73023 settings									Audio Output Results		AN3656 settings				Mute signal
POWER	AV2 SELECT	TV/ VTR	EE/ VV	DVD/VCR MODE	OSD ON(H)	DVD RGB	INPUT- / pro-grammed CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	DVD/AV2 SELECT	Video to YC	AV3/DVD SELECT	YC-out OUT	AV1 Out	AV2 Out	REC/ PB	Input Select	AV1 output Select	AV2 output Select	Mute (H)
	Function menu	AV link				Function menu		AV2-8 in	V-OUTSEL	V-DECSEL	AV1-8	AV2-8 out	RGB OFF(H)	DVD(L)	V-INSEL	SW4,5	YC-out			A-REC/PB	A-INSEL	A-OUTSEL	A-DECSEL	

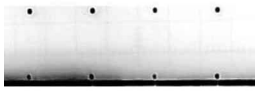
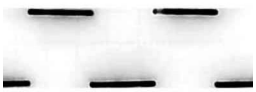
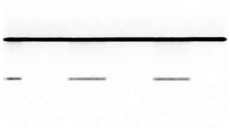
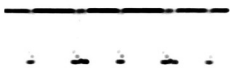
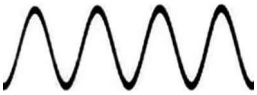
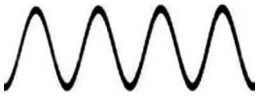
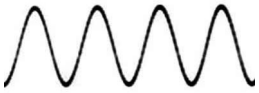
***3[M/H]** **State of AV2PB output should be decided by distinction of PB CTL.**

***4** **In case of EXT LINK (1) mode AV2 PB(H) shall be low, in case of ex. EXTLINK (1) follow the result of DVD**

***5[M/H]** **State of AV PB should be decided by 16:9 information from DVD.**

***6[M/H]** **State of AV2PB output should be decided by distinction of PB CTL.**

***7[M/H]** **State of AV1PB output should be decided by result of AV2PB input.**

 T1150-3 STOP 190Vp-p (5msec.div.)	 T1150-5 STOP 500Vp-p (5usec.div.)	 T1150-7 STOP 36Vp-p (5usec.div.)	 T1150-14 STOP 100Vp-p (5usec.div.)	 T1150-16 STOP 1.8Vp-p (5usec.div.)
 T1150-17 STOP 2.2Vp-p (5usec.div.)	 T1150-18 STOP 3.4Vp-p (5usec.div.)	 T1150-19 STOP 5.2Vp-p (5usec.div.)	 T1150-20 STOP 125Vp-p (5usec.div.)	 IC6001-13 PAUSE 4.4Vp-p (10msec.div.)
 IC6001-18 REC 4.4Vp-p (10msec.div.)	 IC6001-52 REC 2.0Vp-p (10usec.div.)	 IC6001-70 REC 4.6Vp-p (10msec.div.)	 IC6001-68,69 REC 5.2Vp-p (10msec.div.)	 IC6001-79,80 FF/REW 5.0Vp-p (1msec.div.)
 IC6001-71 REC 4.8Vp-p (10msec.div.)	 IC6001-72 REC 4.8Vp-p (10msec.div.)	 IC6001-94,95 REC 6.0Vp-p (10msec.div.)	 IC6001-97 PLAY 4.2Vp-p (10msec.div.)	 IC3001-73 REC/PLAY 4.8Vp-p (5msec.div.)
 IC3001-74 REC/PLAY 4.6Vp-p (5msec.div.)	 IC4501-9,14 REC 1.2Vp-p (5msec.div.)	 IC4501-21 REC 1.2Vp-p (5msec.div.)	 IC4501-53,57 REC/PLAY 1.2Vp-p (5msec.div.)	